SPECIFICATIONS

FOR

COMMODORE BARRY BRIDGE RECREATION AREA PHASES I & II

GV 182.3 .S64 SPECIFICATIONS for

COMMODORE BARRY BRIDGE RECREATION AREA

PHASES I and II

DEPARTMENT OF PARKS, PUBLIC PROPERTY AND RECREATION

in

THE CITY OF CHESTER

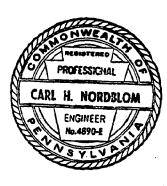
Delaware County, Pennsylvania

JOSEPH F. BATTLE
Mayor, City of Chester

MICHAEL D. MAC NEILLY
Director, Department of Parks and Public Property

LEEDOM B. MORRISON
Director of City Planning

PENNSYLVANIA FISH COMMISSION
Division of Engineering



Carl H Managem

TABLE OF CONTENTS

| | PART A - INSTRUCTIONS AND FORMS | | PAGE NUMBER |
|---|--|-----------------------------|---|
| | Invitation for Bids Instructions to Bidders Form of Bid - General Construction Form of Noncollusion Affidavit of Prime Bidder Form of Bid Bond Form of Statement of Bidder's Qualifications Form of Agreement Form of Performance and Payment Bonds Contractor's and Subcontractor's Public Liability and Property Damage Insurance Certificate of Owner's Attorney Bidder's E.E.O. Certification Subcontractor's E.E.O. Certification | | IV-1 - IV-2* IB-1 - IB-6* FBGC-1 - FBGC-3* NC-1* BB-1 - BB-3* BQ-1 - BQ-2* A-1 - A-4* PB-1 - PB-4* INS-1* CA-1* CD-1* CDS-1* |
| | PART B - GENERAL SPECIFICATIONS | | |
| | General Conditions - Part I General Conditions - Part II General Conditions - Part II Attachment Non-Discrimination and Equal Opportunity Requirement Federal Contract Compliance Regulations Special Conditions Schedule of Drawings | ents | GCI-1 - GCI-22* GCII-1 - GCII-9* GCIIA-1 - GCIIA-5* ND-1 - ND-3* FR-1 SC-1 - SC-10* SD-1* |
| | PART C - TECHNICAL SPECIFICATIONS | PARAGRAPH NO. | PAGE NUMBER |
| | DIVISION 1 - GENERAL | | |
| | Section 1A - Erosion and Sedimentation Control Plan | 1A-1 - 1A-3 | 1A-1 - 1A-2* |
| | DIVISION 2 - SITE WORK | | |
| | Section 2A - Site Preparation and Demolition Section 2B - Earthwork, Crushed Aggregate and Stone Section 2C - Finish Grading and Landscaping Section 2D - Bituminous Paving Section 2E - Floating Docks and Ramps | 2B-1 - 2B-22 | 2A-1 - 2A-2* 2B-1 - 2B-9* 2C-1 - 2C-2* 2D-1 - 2D-4* 2E-1 - 2E-2* |
| | Section 2F - Wooden Guard Posts Section 2G - Chain Link Fence | 2F-1 - 2F-2 2G-1 - 2G-2 | 2F-1* 2G-1 - 2G-3* |
| | DIVISION 3 - CONCRETE | 20-1 - 20-2 | 20-1 - 20 - 3 |
| | | | ° ° |
|) | Section 3A - Cast in Place Concrete Section 3B - Concrete Reinforcement Section 3C - Precast Concrete Plank | 3A-1 - 3A-3 3B-1 3C-1 | 3A-1* 3B-1* 3C-1* |
| - | | | |

TABLE OF CONTENTS (Continued)

| | PARAGRAPH NO. | PAGE NUMBER | |
|---|----------------------|---------------------------------------|--|
| DIVISION 4 - MISCELLANEOUS ITEMS | | | |
| Section 4A - Painting and Welding Section 4B - Dock Stiff Arms Section 4C - Chain | 4A-1 4B-1 4C-1 | 4A-1* 4B-1* 4C-1* | |
| DIVISION 5 - MOISTURE PROOFING | | | |
| Section 5A - Joints and Sealant | 5A-1 - 5A-3 | 5A-1* | |
| DIVISION 6 - MECHANICAL | | | |
| Section 6A - Storm Water Drains Section 6B - Inlet Grates and Frames | 6A-1 - 6A-9 6B-1 | 6A-1 - 6A-3 * 6B-1 * | |
| DIVISION 7 - METAL WORK | | | |
| Section 7A - Steel Sheet Piling | 7A-1 - 7A-3 | 7A-1 - 7A-2* | |
| DIVISION 8 - ELECTRICAL SERVICE | | | |
| Section 8A - Site Lighting | 8A-1 - 8A-12 | 8A-1 - 8A-3* | |
| WAGE RATES | | | |

^{*}Denotes last page of Section

INVITATION FOR BIDS

City of Chester, Pennsylvania

The undersigned Council of the City of Chester, Delaware County, will receive sealed Bids at the Office of the City Clerk, Municipal Building Annex, Fifth and Welsh Streets, Chester, Pennsylvania 19013, until 9:30 A.M. Local Time on for furnishing all labor, materials, tools, and equipment required for the construction of Commodore Barry Bridge Recreation Area, Phase I - General Construction.

Bids will be publicly opened in the presence of City Council at 10:00 A.M. in the Municipal Building, Fifth and Welsh Streets, Chester, Pennsylvania 19013, on the above date, and read aloud.

Contract Documents, including Drawings, Specifications and Bid Documents, may be obtained at the Department of Accounts and Finance Purchasing, Municipal Building Annex, Fifth and Welsh Streets, Chester, Pennsylvania 19013, between the hours of 9:00 A.M. and 4:30 P.M. by depositing Twenty-Five Dollars (\$25.00) with above Department for each set of documents so obtained. Each such deposit will be refunded if the Contract Documents, including Drawings and Specifications, are returned in good condition within ten (10) days after bid opening.

Each Bid must be accompanied by a certified check or bank draft payable to the City of Chester, negotiable U.S. Government Bonds (at par value), or a satisfactory Bid Bond executed by the Bidder and an acceptable Surety, in an amount of not less than ten percent (10%) of the total Bid, and be enclosed in a sealed envelope plainly endorsed on the outside, "BID FOR CONSTRUCTION OF COMMODORE BARRY BRIDGE RECREATION AREA, PHASE I - GENERAL CONSTRUCTION", addressed to the Office of the City Clerk, Municipal Building Annex, Fifth and Welsh Streets, Chester, Pennsylvania 19013.

The successful Bidder will be required to furnish and pay for satisfactory performance and payment bonds.

Attention is called to the fact that not less than the minimum salaries and wages as set forth in the Contract Documents must be paid on this project and that the Contractor must ensure that employees and applicants for employment are not discriminated against because of their race, color, religion, sex, or national origin.

The Bidder's attention is called to the following provisions which are set forth in detail in the Contract Documents and which are required for this project:

- 1. Affirmative Action to Ensure Equal Employment Opportunity (Executive Order 11246).
- 2. Standard Federal Equal Employment Opportunity Construction Contract Specifications (Executive Order 11246).

Council reserves the right to accept or reject any or all bids or parts thereof and to waive any informalities in the Bidding and to consider the competency, qualifications and responsibility of the Bidder to base the award of the Contract as it deems to the best interest of the City of Chester, Pennsylvania.

Bids may be held by the City of Chester for a period not to exceed thirty (30) days from the date of the opening of the Bids for the purpose of reviewing the Bids and investigating the qualifications of the Bidders, prior to awarding the Contract. No Bidder may withdraw his Bid within this time period.

JOSEPH F. BATTLE MICHAEL D. MACNEILLY JAMES L. SHARP MICHAEL J. KOTERBA CLINTON L. JOHNSON

COUNCIL OF THE CITY OF CHESTER

INSTRUCTIONS TO BIDDERS

USE OF SEPARATE BID FORMS

These Contract Documents include a complete set of bidding and Contract forms which are for the convenience of bidders and are not to be detached from the Contract Document, filled out, or executed. Separate copies of Bid Forms are furnished for that purpose.

2. INTERPRETATIONS OR ADDENDA

No oral interpretation will be made to any Bidder as to the meaning of the Contract Documents or any part thereof. Every request for such an interpretation shall be made in writing to the Department of Parks and Public Property. Any inquiry received seven or more days prior to the date fixed for opening of Bids will be given consideration. Every interpretation made to a Bidder will be on file in the office of the Department of Parks and Public Property at least five days before Bids are opened. In addition, all Addenda will be mailed to each person holding Contract Documents, but it shall be the Bidder's responsibility to make inquiry as to the Addenda issued. All such Addenda shall become part of the Contract and all Bidders shall be bound by such Addenda, whether or not received by the Bidders.

INSPECTION OF SITE

Each Bidder should visit the site of the proposed work and fully acquaint himself with the existing conditions there relating to construction and labor, and should fully inform himself as to the facilities involved, the difficulties and restrictions attending the performance of the Contract. The Bidder should thoroughly examine and familiarize himself with the Drawings, Technical Specifications, and all other Contract Documents. The Contractor by the execution of the Contract shall in no ways be relieved of any obligation under it due to his failure to receive or examine any form or legal instrument or to visit the site and acquaint himself with the conditions there existing and the Department of Parks and Public Property will be justified in rejecting any claim based on facts regarding which he should have been on notice as a result thereof.

ALTERNATIVE BIDS

No alternative bids will be considered unless alternative bids are specifically requested by the technical specifications.

5. BIDS

- a. All Bids must be submitted on forms supplied by the Dept. of Parks and Public Property and shall be subject to all requirements of the Contract Documents, including the Drawings, and these INSTRUCTIONS TO BIDDERS. All Bids must be regular in every respect and no interlineations, excisions or special conditions shall be made or included in the Bid Form by the Bidder.
- b. Bid documents including the Bid, the Bid Guaranty, the Non-Collusion Affidavit, the Certification of Bidder Regarding Equal Employment Opportunity and the Statement of Bidder's Qualifications (if requested) shall be enclosed in envelopes (outer and inner), both of which shall be sealed and clearly labeled as indicated in the INVITATION FOR BIDS.
- c. The Dept. of Parks and Public Property may consider as irregular any Bid on which there is an alteration of or departure from the Bid Form hereto attached and at its option may reject the same.
- d. If the Contract is awarded, it will be awarded by the Dept. of Parks and Public Property to a responsible Bidder on the basis of the lowest Bid most favorable to the Dept. of Parks and Public Property. The Contract will require the completion of the work according to the Contract Documents.
 - e. Each Bidder shall include in his Bid the following information:

Principals

Names Social Security Numbers Home addresses, including City, State and Zip Code

<u>Firm</u>

Name Treasury Number Address City, State, and Zip Code

BID GUARANTY

a. The Bid must be accompanied by a Bid guaranty which shall not be less than ten (10%) percent of the amount of the Bid. At the option of the Bidder, the guaranty may be a certified check, bank draft, negotiable U.S. Govt. Bonds (at par value) or a

bid bond in the form attached. The Bid bond shall be secured by a guaranty or a surety company listed in the latest issue of U. S. Treasury Circular 570. The amount of such Bid bond shall be within the maximum amount specified for such Company in said Circular 570. No Bid will be considered unless it is accompanied by the required guaranty. Certified check or bank draft must be made payable to the order of the City of Chester. Cash deposits will not be accepted. The Bid guaranty shall insure the execution of the Agreement and the furnishing of the surety bond or bonds by the successful Bidder, all as required by the Contract Documents.

- b. Revised Bids submitted before the opening of Bids, whether forwarded by mail or telegram, if representing an increase in excess of two percent (2%) of the original Bid, must have the Bid guaranty adjusted accordingly; otherwise the Bid will not be considered.
- c. Certified checks or bank drafts, or the amount thereof, Bid bonds, and negotiable U. S. Government bonds of unsuccessful Bidders will be returned as soon as practical after the opening of the Bids.

7. COLLUSIVE AGREEMENTS

- a. Each Bidder submitting a Bid to the Dept. of Parks and Public Property for any portion of the work contemplated by the documents on which bidding is based shall execute and attach thereto, an affidavit substantially in the form herein provided, to the effect that he has not entered into a collusive agreement with any other person, firm, or corporation in regard to any Bid submitted.
- b. Before executing any subcontract the successful Bidder shall submit the name of any proposed subcontractor for prior approval and an affidavit substantially in the form provided in Section 103 hereof.

8. STATEMENT OF BIDDER'S QUALIFICATIONS

Each Bidder shall upon the request of the Dept. of Parks and Public Property submit on the form furnished for that purpose (a copy of which is included in the Contract Documents), a statement of the Bidder's qualifications, his experience record in constructing the type of improvements embraced in the Contract Documents, his organization and equipment available for the work contemplated, and when specifically requested by the Dept. of Parks and Public Property, a detailed financial statement. The Dept. of Parks and Public Property shall have the right to take such steps as it deems necessary to determine the ability of the Bidder to perform his obligations under the Contract and the Bidder shall furnish the Dept. of Parks and Public Property all such information and data for this purpose as it may request. The right is reserved to reject any Bid where an investigation of the available evidence or information does not satisfy the Dept. of Parks and Public Property that the Bidder is qualified to carry out properly the terms of the Contract.

SUBCONTRACTORS

a. Each bidder shall upon the request of the Department of Parks and Public Property submit the name of his proposed subcontractors and a statement of the proposed subcontractor's qualifications. This statement shall be in substantially the same form as the "Statement of Bidder's Qualifications" included in these Contract Documents and shall include the proposed subcontractor's experience record in constructing similar work, his organization and equipment available for the work contemplated and, if requested, a detailed financial statement.

10. CORRECTIONS

Erasures or other changes in the Bids must be explained or noted over the signature of the Bidder.

11. TIME FOR RECEIVING BIDS

- a. Bids received prior to the advertised hour of opening will be securely kept sealed. The officer whose duty it is to receive them will decide when the stipulated time has arrived, and no Bid received thereafter will be considered; except that when a Bid arrives by mail after the time fixed for receipt, but before the reading of all other Bids is completed, and it is shown to the satisfaction of the Council of the City of Chester that the nonarrival on time was due solely to delay in the mails for which the Bidder was not responsible, such Bid will be received and considered.
- b. Bidders are cautioned that, while telegraphic modifications of Bids may be received as provided above, such modifications, if not explicit and if in any sense subject to misinterpretation, shall make the Bidso modified or amended, subject to rejection.

12. OPENING OF BIDS

At the time and place fixed for the opening of Bids, the Council of the City of Chester will cause to be opened and publicly read aloud every Bid received within the time set for receiving Bids, irrespective of any irregularities therein. Bidders and other persons properly interested may be present, in person or by representative.

13. WITHDRAWAL OF BIDS

Bids may be withdrawn on written or telegraphic request dispatched by the Bidder in time for delivery in the normal course of business to the time fixed for opening; provided that written confirmation of any telegraphic withdrawal over the signature of the Bidder is placed in the mail and postmarked prior to the time set for Bid opening. The Bid guaranty of any Bidder withdrawing his Bid in accordance with the foregoing conditions will be returned promptly.

14. AWARD OF CONTRACT: REJECTION OF BIDS

- a. The Contract will be awarded to the responsible Bidder submitting the lowest bid complying with the conditions of the Invitation for Bids, provided such Bid is reasonable and it is to the interest of the Department of Parks and Public Property to accept it. The Bidder to whom the award is made will be notified at the earliest possible date. The Department of Parks and Public Property, however, reserves the right to reject any and all Bids and to waive any informality in Bids received whenever such rejection or waiver is in its interest.
- b. The Department of Parks and Public Property reserves the right to consider as unqualified to do work of general construction any Bidder who does not habitually perform with his own forces the major portions of the work involved in construction of the improvements embraced in this Contract.

15. EXECUTION OF AGREEMENT: PERFORMANCE AND PAYMENT BOND

- a. Subsequent to the award and within ten (10) days after the prescribed forms are presented for signature, the successful Bidder shall execute and deliver to the Department of Parks and Public Property an Agreement in the form included in the Contract Documents in such number of copies as the Department of Parks and Public Property requires.
- b. Having satisfied all conditions of award as set forth elsewhere in these documents, the successful Bidder shall, within the period specified in paragraph "a" above, furnish surety bonds, each in a penal sum not less than 100% of the amount of the Contract as awarded, as security for the faithful performance of the Contract, and for the payment of all persons, firms, or corporations to whom the Contractor may become legally indebted for labor, materials, tools, equipment, or services of any nature including utility and transportation services, employed or used by him in performing the work. Such bonds shall be in the same form as those included in the Contract Documents and shall bear the same date as, or a date subsequent to, that of the Agreement. The current power of attorney for the person who signs for any surety company shall be attached to such bonds. These bonds shall be signed by a guaranty or surety company listed in the latest issue of the U.S. Treasury Circular 570 and the penal sum shall be within the maximum specified for such company in said Circular 570.

c. The failure of the successful Bidder to execute such Agreement and to supply the required bonds within ten (10) days after the prescribed forms are presented for signature, or within such extended period as the Dept. of Parks and Public Property may grant, based upon reasons determined sufficient by the Dept. of Parks and Public Property shall constitute a default, and the Dept. of Parks and Public Property may either award the Contract to the next lowest responsible Bidder or readvertise for Bids, and may charge against the Bidder the difference between the amount for which a Contract for the work is subsequently executed, irrespective of whether the amount thus due exceeds the amount of the Bid bond. If a more favorable Bid is received by readvertising the defaulting Bidder shall have no claim against the Dept. of Parks and Public Property for a refund.

16. WAGES AND SALARIES

- a. Attention of Bidders is particularly called to the requirements concerning the payment of not less than the prevailing wage and salary rates specified in the Contract Documents and the conditions of employment with respect to certain categories and classifications of employees. See GENERAL CONDITIONS, PART II.
- b. The rates of pay set forth under GENERAL CONDITIONS, PART II, are the minimums to be paid during the life of the Contract. It is therefore the responsibility of Bidders to inform themselves as to local labor conditions, such as the length of work day and work week, overtime compensation, health and welfare contributions, labor supply and prospective changes or adjustments of rates.

17. EQUAL EMPLOYMENT OPPORTUNITY

Attention of Bidders is particularly called to the requirement for ensuring that employees and applicants for employment are not discriminated against because of their race, color, religion, sex, or national origin.

FORM OF BID FOR COMMODORE BARRY BRIDGE RECREATION AREA, PHASE I - GENERAL CONSTRUCTION

To the Department of Parks and Public Property, Municipal Building, Fifth and Welsh Streets, Chester, Pennsylvania 19013

| Gentlemen: | | | |
|--|--|--|--|
| 1. The undersigned, having familiarized (himself)(themselves)(itself) | | | |
| (himself)(themselves)(itself) with the existing conditions on the Project Area affecting the cost of the work, and with the Contract Documents (which includes Invitation for Bids, Instructions to Bidders, the Form of Bid, the Form of Bid Bond, Form of Contract (or Agreement), Form of Noncollusion Affidavit, Addenda (if any), General Conditions, Parts I, II and IIA, Special Conditions, Technical Specifications, Drawings (as listed in the Schedule of Drawings), and Form of Surety or Bonds; as prepared by | | | |
| and on file in the office of the Department of Parks and Public Property, hereby proposes to furnish all supervision, technical personnel, labor, materials, machinery, tools, appurtenances, equipment, and services, including utility and transportation services, required to construct and complete Commodore Barry Bridge Recreation Area, Phase I - General Construction, all in accordance with above listed documents for work in place for the following Bid Amount (IN WORDS AND FIGURES): | | | |
| TOTAL BID AMOUNT | | | |
| <u> </u> | | | |
| 2. In submitting this bid, the Bidder understands that the right is reserved by the Department of Parks and Public Property to reject any and all Bids. If written notice of the acceptance of this Bid is mailed, telegraphed, or delivered to the undersigned within thirty (30) days after the opening thereof, or at any time thereafter before this Bid is withdrawn, the undersigned agrees to execute and deliver an agreement in the prescribed form and furnish the required bond within ten (10) days after Agreement is presented to him for signature. | | | |
| 3. Security in the sum of DOLLARS (\$) in the form of , is submitted herewith in accordance with the INSTRUCTIONS TO BIDDERS. | | | |

- 4. Attached hereto is an affidavit in proof that the undersigned has not entered into a collusive agreement with any person in respect to this Bid or any other Bid or the submitting of Bids for the Contract for which this Bid is submitted.
- 5. The Bidder further proposes that the work required under this Contract shall be commenced at the time stipulated by the Local Public Agency in the Notice to Proceed to the Contractor and shall be fully completed on or before _______, or to pay the Department of Parks and Public Property liquidated damages of Fifty Dollars (\$50.00) per day for each calendar day of delay as fixed by paragraph 402, Special Conditions of these Contract Documents.
- 6. The Bidder is prepared to submit a financial and experience statement upon request.

CERTIFICATION OF NONSEGREGATED FACILITIES

The Bidder certifies that he does not maintain or provide for his employees any segregated facilities at any of his establishments, and that he does not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. The bidder certifies further that he will not maintain or provide for his employees any segregated facilities at any of his establishments, and that he will not permit his employees to perform their services at any location under his control where segregated facilities are maintained. The bidder agrees that a breach of this certification will be a violation of the Equal Opportunity clause in any contract resulting from acceptance of this Bid. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, or national origin, because of habit, local custom, or otherwise. The bidder agrees that (except where he has obtained identical certification from proposed subcontractors for specific time periods) he will obtain identical certifications from proposed sub-contractors prior to the award of subcontracts exceeding \$10,000.00 which are not exempt from the provisions of the Equal Opportunity clause, and that he will retain such certifications in his files.

Note: The penalty for making false statements in offers is prescribed in 18 U.S.C. - 1001.

| (Name of Bidder) |
|------------------|
| Ву |
| |
| (Title) |
| |

NONCOLLUSION AFFIDAVIT OF PRIME BIDDER

| State of | |
|--|---|
| County of ss. | |
| | being first duly sworn, deposes and |
| says that: | |
| (1) He is | of |
| (1) He is | itative, or agent) that has submitted the attached Bid; |
| (2) He is fully informed respecting the preparand of all pertinent circumstances respecting such | |
| (3) Such Bid is genuine and is not a collusive | e or sham Bid; |
| sentatives, employees or parties in interest, included conspired, connived or agreed, directly or indirect to submit a collusive or sham Bid in connection with Bid has been submitted or to refrain from bidding in any manner, directly or indirectly, sought by any or conference with any other Bidder, firm or personal Bid or of any other Bidder, or to fix any overhead, the Bid price of any other Bidder, or to secure three or unlawful agreement any advantage against the Departy of the city of Chester or any personand (5) The price or prices quoted in the attached by any collusion, conspiracy, connivance or unlawful agreements, representatives, owners, employ affiant. | tly with any other Bidder, firm or person the the Contract for which the attached in connection with such Contract, or has greement or collusion or communication in to fix the price or prices in the attached, profit or cost element of the Bid price or bugh any collusion, conspiracy, connivance Department of Parks and Public on interested in the proposed Contract de Bid are fair and proper and are not tainted wful agreement on the part of the Bidder or |
| (Signed) | |
| Subscribed and sworn to before me this, 19 | Title |
| | My commission expires |
| Title | |

BID BOND

| KNOW ALL MEN BY THESE PRESENTS, that we the undersigned, |
|---|
| , as PRINCIPAL, and |
| (Name of Principal) (Name of |
| , as SURETY are held and firmly bound unto The Departme |
| Surety) of Parks and Public Property of The City of Chester, hereinafter called the "Local Public Agency", in the penal sum of Dollar (\$\\$\) lawful money of the United States, for the payment of which sum we and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents. |
| THE CONDITION OF THIS OBLIGATION IS SUCH, that Whereas the Principal has submitted |
| the Accompanying Bid, dated, 19, for |
| NOW, THEREFORE, if the Principal shall not withdraw said Bid within the period specified therein after the opening of the same, or, if no period be specified, within thirty (30) days after the said opening, and shall within the period specified therefor, or if no period be specified, within ten (10) days after the prescribed forms are presented to him for signature, enter into a written Contract with the Local Public Agency in accordance with the Bid as accepted, and give bond with good and sufficient surety or sureties, as may be required, for the faithful performance and proper fulfillment of such Contract; or in the event of the withdrawal of said Bid within the period specified, or the failure to enter into such Contract and give such bond within the time specified, if the Principal shall pay the Local Public Agency the difference between the amount specified in said Bid and the amount for which the Local Public Agency may procure the required work or supplies or both, if the latter be in excess of the former, then the above obligation shall be void and of no effect, otherwise to remain in full force and virtue. |
| IN WITNESS WHEREOF, the above-bounded parties have executed this instrument under their several seals this |

| IN PRESENCE OF : | | | |
|------------------------|--|-------------------|----------------------------|
| | | | (SEAL) |
| | (Individual Principal) | | |
| | (Business address includ | ling ZIP code) | |
| | | (Partnership) | (SEAL) |
| | (Business address includ | ling ZIP code) | |
| Attest: | | Ву: | |
| | .0 | (Corporate P | rincipal) |
| | (Business address includ | ling ZIP code) | |
| | Ву: | | Affix Corporate Seal |
| Attest: | | | |
| | | (Corporate Surety | y) Affix |
| | Ву: | | Corporate Seal |
| Countersigned by: | and an angular state of the second state of th | | |
| *Attorney-in-Fact, Sta | te of | | |
| | | | * |

^{*} Power-of-attorney for person signing for surety company must be attached to bond.

CERTIFICATE AS TO CORPORATE PRINCIPAL

| 1, | , certify that I am the | |
|---------------------------|--|-----|
| | | |
| Secretary of the Corpor | on named as Principal in the within bond; that | _ |
| | , who signed the said bond on behalf of the Principal was | |
| then | of said corporation; that I know | |
| his signature, and his si | ature thereto is genuine; and that said bond was duly signed, | |
| sealed, and attested to | and in behalf of said corporation by authority of this governing | 9 |
| body. | | |
| | (Corpora (Seal | te) |
| | Title | |

STATEMENT OF BIDDER'S QUALIFICATIONS

(To be submitted by the Bidder only upon the specific request of the Department of Parks and Public Property.

All questions must be answered and the data given must be clear and comprehensive. This statement must be notarized. If necessary, questions may be answered on separate attached sheets. The Bidder may submit any additional information he desires.

- 1. Name of Bidder.
- 2. Permanent main office address.
- 3. When organized.
- 4. If a corporation, where incorporated.
- 5. How many years have you been engaged in the contracting business under your present firm or trade name?
- 6. Contracts on hand: (Schedule these, showing amount of each contract and the appropriate anticipated dates of completion.)
- 7. General character of work performed by your company.
- 8. Have you ever failed to complete any work awarded to you? If so, where and why?
- 9. Have you ever defaulted on a contract? If so, where and why?
- 10. List the more important projects recently completed by your company, stating the approximate cost for each, and the month and year completed.
- 11. List your major equipment available for this contract.
- 12. Experience in construction work similar in importance to this project.
- 13. Background and experience of the principal members of your organization, including the officers.
- 14. Credit available: \$_____

| 15. | Give Bank reference : | | |
|----------|--|--|--|
| 16. | Will you, upon request, fill out a detailed financial statement and furnish any other information that may be required by the Department of Parks and Public Property? | | |
| 17. | The undersigned hereby authorizes and requests any person, firm or corporation to furnish any information requested by the Department of Parks and Public Property in verification of the recitals comprising this Statement of Bidder's Qualifications. | | |
| | | | |
| | | | |
| | (Name of Bidder) | | |
| | Ву | | |
| | Title | | |
| State of |) 55. | | |
| County | <u>of</u> | | |
| | being duly sworn deposes and | | |
| says tha | t he is of | | |
| · | of Name of Organization) | | |
| | and that the answers to the foregoing questions and all | | |
| stateme | nts therein contained are true and correct. | | |
| 19 | Subscribed and sworn to before me this day of, | | |
| | (Notary Public) | | |
| | My commission expires , 19 . | | |

AGREEMENT FOR COMMODORE BARRY BRIDGE RECREATION AREA

| THIS AGREEMENT made this | day of | , 19 by and |
|--|--|---|
| between | | (a corporation |
| organized and existing under the laws | of the state of)_ | |
| (a partnership consisting of | |) |
| (an individual trading as | | [*(|
| hereinafter called the "Contractor", Property of the City of Chester herei | and the Department nafter called the | of Parks and Public "Local Public Agency", |
| WITNESSETH, that the Contractor considerations stated herein mutually | | |
| ARTICLE 1. Statement of Work. vision, technical personnel, labor, mand services, including utility and tocomplete all work required for the coin the Contract Documents; namely, | naterials, machiner cransportation serv | y, tools, equipment, ices, and perform and |
| | and required su | upplemental work for |
| the Commodore Barry Bridge Recreation | Area, Phase I, | |
| | , all in strict | accordance with the |
| Contract Documents, including all Add | lenda thereto, numb | ered, dated |
| and dated _ | , all a | s prepared by |
| | | |
| acting in behalf of the Department of Contract Documents referred to as the "Engineer". | | , - |
| *1 Strike out the two terms not appli | cable | |

In the event that the Contractor does not perform the work according to the Contract Documents, and even though such failure of performance cannot be ascertained until some period of time in the future, the Local Public Agency shall have the right to call upon the Contractor to make good the work that was improperly performed, by written notice, informing him of the defective work; and upon the neglect or refusal of the Contractor to comply with such requests, this shall constitute a breach of the condition of this contract and in such event, any attorney of any court of record of Pennsylvania or elswhere is hereby authorized and empowered by the Contractor to appear for and enter judgment against the said Contractor for whatever sum of money is necessary to be spent in order to correct the deficient work of the Contractor; and the Contractor further agrees that such judgment may be entered against him, without defalcation, with costs of suit, release of errors and without stay of execution, together with five per cent added for collection fees, and the Contractor further waives the right of inquisition upon any real estate that may be levied upon to collect the amount due hereunder and does hereby voluntarily condemn the same and authorizes the Prothonotary to issue a Writ of Execution; and further agrees that any real or personal property may be sold upon a Writ of Execution and does hereby waive and release any and all appraisement, stay or exemption laws of any state, now in force, or hereafter to be passed.

| ARTICLE 2. | The Contract Price. | The Local Public Agency shall |
|----------------------|------------------------|----------------------------------|
| pay the Contractor | for the performance of | the Contract, in current funds |
| subject to additions | and deductions as pro- | vided in Section 109 hereof, the |
| sum of | | Dollars |
| (\$ |). | |

 $\frac{\mathsf{ARTICLE}\ 3.}{\mathsf{following:}}$ Contract. The executed Contract Documents shall consist of

- a. This Agreement
- b. Addenda
- c. Invitation for Bids
- d. Instructions to Bidders
- e. Signed copy of Bid
- f. General Conditions
- g. Special Conditions
- h. Technical Specifications
- Drawings (as listed in the Schedule of Drawings)

This Agreement, together with other documents enumerated in this ARTICLE 3, which said other documents are as fully a part of the Contract as if hereto attached or herein repeated, forms the Contract between the parties hereto. In the event that any provision in any component part of this Contract conflicts with any provision of any other component part, the provision of the component part first enumerated in this ARTICLE 3 shall govern, except as otherwise specifically stated.

IN WITNESS WHEREOF, the parties hereto have caused this AGREEMENT to be executed in six (6) original copies on the day and year first above written.

| ATTEST: | (Contractor) | |
|---|---------------------------------------|--|
| | <u>By</u> *2 | |
| | Title | |
| | Business Address, including ZIP code: | |
| | | |
| | | |
| | (Local Public Agency) | |
| | Ву | |
| | Title | |
| (Print or type the names underneath all | signatures) | |

^{*2} Supply description of Contractor: Owner, Partnership or Corporation.

CERTIFICATIONS

| l | certify that I am the | | |
|---------------------|-----------------------|------------------------------------|--------------------|
| | of the corporation i | named as Contractor herein; that | |
| | who signed th | is Agreement on behalf of the Co | ntractor, was then |
| | · | of said corporation; that said A | Agreement was |
| duly signed for and | in behalf of said co | poration by authority of its gover | ning body, and |
| is within the scope | of its corporate powe | ers. | |
| | | | |
| | | | Corporate |
| | | | |
| | • | | SEAL |

PERFORMANCE BOND

| KNOW ALL MEN BY THESE PRESENTS: That we (1) |
|--|
| , a (2) |
| hereinafter called "Principal" and (3) |
| of |
| THE CONDITION OF THIS OBLIGATION is such that Whereas, the Principal entered into a certain contract with the Owner, dated the day of, a copy of which is hereto attached and made a part hereof, for the construction of Commodore Barry Bridge Recreation Area, Phase I, according to plans and specifications prepared by |

NOW, THEREFORE, If the Principal shall well, truly and faithfully perform its duties, all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term thereof, and any extensions thereof which may be granted by the Owner, with or without notice to the Surety, and if he shall satisfy all claims and demands incurred under such contract; and shall fully indemnify and save harmless the Owner from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the Owner all outlay and expense which the Owner may incur in making good any default, then this obligation shall be void; otherwise, to remain in full force and effect.

PROVIDED FURTHER, that the said Surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the work to be performed thereunder or the specifications accompanying the same shall in any wise effect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the work or to the specifications.

PROVIDED FURTHER, that no final settlement between the Owner and the Contractor shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

| ATTEST: | |
|-----------------------------|-------------------------------|
| | (Principal) |
| (Principal Secretary) | Ву |
| (SEAL) | (address) |
| (Witness as to Principal) | |
| (Address) | (Surety) |
| ATTEST: | By(Attorney-if-fact) |
| (Surety Secretary) | (Address) |
| (SEAL) | · · |
| (Witness as to Surety) | · |
| (Address) | • |
| NOTE: Date of Bond must not | be prior to date of Contract. |

PAYMENT BOND

| KNOW ALL MEN BY THESE PRESENTS: | That we (1) |
|--|---|
| | , a (2) |
| hereinafter called "Principal" and (3) | |
| of | , State of |
| of Parks and Public Property, of Chest "Owner", in the penal sum of (\$) in lawful money of the which sum well and truly to be made, w | neld and firmly bound unto The Department ter, Pennsylvania, hereinafter called Dollars te United States, for the payment of we bind ourselves, our heirs, executors, y and severally, firmly by these presents |
| entered into a certain contract with to a copy part hereof, for the construction of (| is such that Whereas, the Principal the Owner, dated the day of of which is hereto attached and made a Commodore Barry Bridge Recreation Area, fications prepared by |
| | |

NOW, THEREFORE, If the Principal shall promptly make payment to all persons, firms, subcontractors, and corporations furnishing materials for or performing labor in the prosecution of the work provided for in such contract, and any authorized extension or modification thereof including all amounts due for materials, lubricants, oil, consumed or used in connection with the construction of such work, and for all labor performed in such work whether by subconstractor or otherwise, then this obligation shall be void; otherwise, to remain in full force and effect.

PROVIDED FURTHER, that the said Surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the work to be performed thereunder or the specifications accompanying the same shall in any wise effect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the work or to the specifications.

PROVIDED FURTHER, that no final settlement between the Owner and the Contractor shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

| each one of which shall be deem day of | ed an original, this the |
|--|--------------------------|
| | (Principal) |
| | (Surety) |
| ATTEST: | |
| (Surety Secretary) | By (Attorney-in-Fact) |
| (SEAL) | (Address) |
| (Witness as to Surety) | |
| (Address) | |

NOTE: Date of Bond must not be prior to date of Contract.

- (1) Correct name of Contractor.
- (2) A Corporation, a Partnership, or an Individual, as case may be.
- (3) Correct name of Surety.
- (4) Insert correct form of signature for a corporation, a partnership, or a sole trader, as appropriate. If Contractor is Partnership, all partners should execute Bond.

CONTRACTOR'S AND SUBCONTRACTOR'S COMPREHENSIVE GENERAL LIABILITY AND PROPERTY DAMAGE INSURANCE

As required under the General Conditions, the Comprehensive General Liability Policy shall be in an amount not less than \$500,000.00 for injuries, including accidental death, or for care and loss of services because of bodily injury sustained by one or more persons as a result of any one occurrence, and the Contractor's Property Damage Insurance shall be in an amount not less than \$100,000.00 with an aggregate limit of \$300,000.00.

The Contractor shall either (1) require each of his subcontractors to procure and to maintain during the life of his subcontract, Subcontractor's General Liability and Property Damage Insurance of the type and in the same amounts as specified in the preceeding paragraph, or (2) insure the activities of his subcontractors in his own policy.

CONTRACTOR'S BUILDERS RISK INSURANCE

The Contractor shall carry, during the life of the Contract, Builders Risk Insurance in an amount equal to the value of his Contract.

CERTIFICATE OF OWNER'S ATTORNEY

| I, the undersigned, |
|---|
| the duly authorized and acting legal representative of the Department of Parks |
| and Public Property of the City of Chester, Pennsylvania, do hereby certify |
| as follows: |
| I have examined the foregoing contract and surety bonds and the manner of execution thereof, and I am of the opinion that each of the aforesaid agreements has been duly executed by the proper parties thereto acting through their duly authorized representatives; that said representatives have full power and authority to execute said agreements on behalf of the respective parties named thereon; and that the foregoing agreements constitute valid and legally binding obligations upon the parties executing the same in accordance with terms, conditions and provisions thereof. |
| Dated: |

U. S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

CERTIFICATION OF BIDDER REGARDING EQUAL EMPLOYMENT OPPORTUNITY

INSTRUCTIONS

This certification is required pursuant to Executive Order 11246 (30 F. R. 12319-25). The implementing rules and regulations provide that any bidder or prospective contractor, or any of their proposed subcontractors, shall state as an initial part of the bid or negotiations of the contract whether it has participated in any previous contract or subcontract subject to the equal opportunity clause; and, if so, whether it has filed all compliance reports due under applicable instructions.

Where the certification indicates that the bidder has not filed a compliance report due under applicable instructions,

such bidder shall be required to submit a compliance report within seven calendar days after bid opening. No contract shall be awarded unless such report is submitted. CERTIFICATION BY BIDDER Bidder's Name: _ Address and Zip Code: _ Bidder has participated in a previous contract or subcontract subject to the Equal Opportunity Clause. No [(If answer is yes, identify the most recent contract.) 2. Compliance reports were required to be filed in connection with such contract or subcontract. No [(If answer is yes, identify the most recent contract.) 3. Bidder has filed all compliance reports due under applicable instructions, including SF-100. No None Required 4. If answer to item 3 is "No," please explain in detail on reverse side of this certification. Certification - The information above is true and complete to the best of my knowledge and belief. Name and Title of Signer (Please Type) Signature Date

U. S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

CERTIFICATION BY PROPOSED SUBCONTRACTOR REGARDING EQUAL EMPLOYMENT OPPORTUNITY

| NAME OF PRIME CONTRACTOR | PROJECT NO. |
|--|---|
| THE OF CRIME CONTRACTOR | rnosau i no. |
| INSTRUCTIONS | |
| This certification is required pursuant to Executive Order 11246 (3 regulations provide that any bidder or prospective contractor, or an an initial part of the bid or negotiations of the contract whether it lacantract subject to the equal opportunity clause; and, if so, whethe applicable instructions. | y of their proposed subcontractors, shall state as has participated in any previous contract or sub- |
| Where the certification indicates that the subcontractor has not file structions, such subcontractor shall be required to submit a complicontract or permits work to begin under the subcontract. | |
| SUBCONTRACTOR'S CERT | IFICATION |
| Subcontractor's Name: | |
| Address: | |
| | |
| Bidder has participated in a previous contract or subcontract so Yes No | bject to the Equal Opportunity Clause. |
| Compliance reports were required to be filed in connection with Yes No | such contract or subcontract. |
| 3. Bidder has filed all compliance reports due under applicable in Yes No None Required | structions, including SF-100. |
| 4. If answer to item 3 is "No," please explain in detail on revers | e side of this certification. |
| Certification — The information above is true and complete to the | best of my knowledge and belief. |
| NAME AND TITLE OF SIGNER | (Please Type) |
| | |
| | |

GENERAL SPECIFICATIONS

GENERAL CONDITIONS - PART 1

101. DEFINITIONS

Whenever used in any of the Contract Documents, the following meanings shall be given to the terms herein defined:

- a. The term "Contract" means the Contract executed by the Local Public Agency and the Contractor, of which these GENERAL CONDITIONS, PARTS I, II and II Attachment form a part.
- b. The term "Local Public Agency" means the Department of Parks and Public Property of the City of Chester which is authorized to undertake this Contract.
- c. The term "Contractor" means the person, firm, or corporation entering into the Contract with the Local Public Agency to construct and install the Improvements embraced in this Contract.
- d. The term "Project Area" means the site of the Project within which are the specified Contract limits of the Improvements contemplated to be constructed in whole or in part under this Contract.
- e. The terms "Engineer", "Architect", and "Landscape Architect" means The Delta Group or their authorized representative, serving the Local Public Agency with architectural or engineering services, their successor, or any other person or persons employed by said Local Public Agency for the purpose of directing or having in charge the work embraced in this Contract, the said Engineer acting directly or indirectly through any assistant having general charge of the work or through any assistant having immediate charge of a portion thereof limited by the particular duties intrusted to him.
- f. The term "Local Government" means the City of Chester, Pennsylvania, within which the Project Area is situated.
- g. The term "Contract Documents" means and shall include the following: Executed Agreement, Addenda (if any), Invitations for Bids, Instructions to Bidders, Signed Copy of Bid, General Conditions, Parts I, II, and II Attachment, Special Conditions, Technical Specifications, and Drawings.

- h. The term "Drawings" means the drawings listed in the Schedule of Drawings.
- i. The term "Technical Specifications" means that part of the Contract Documents which describes, outlines and stipulates: the quality of the materials to be furnished; the quality of workmanship required; and the methods to be used in carrying out the construction work to be performed under this Contract.
- j. The term "Addendum" or "Addenda" means any changes, revisions or clarifications of the Contract Documents which have been duly issued by the Department of Parks and Public Property to prospective Bidders prior to the time of receiving Bids.

AUTHORITY OF THE ENGINEER

All work under this Contract shall be done to the satisfaction of the Engineer, who shall in all cases determine the amount, quality, acceptability and fitness of the materials and workmanship which are paid for hereunder, and shall decide all questions which may arise as to the fulfillment of this Contract on the part of the Contractors.

102. SUPERINTENDENCE BY CONTRACTOR

- a. Except where the Contractor is an individual and gives his personal superintendence to the work, the Contractor shall provide a competent superintendent, satisfactory to the Department of Parks and Public Property and the Engineer, on the work at all times during working hours with full authority to act for him. The Contractor shall also provide an adequate staff for the proper coordination and expediting of his work.
- b. The Contractor shall retain an experienced engineer who shall establish bench marks on the site, lines, elevations and stakes necessary for laying out the entire work. He shall verify and adjust these as necessary before proceeding with and during progress of the work and shall be held responsible for any error resulting from his failure to do so. The Contractor shall be responsible for all work executed by him under the Contract.

103. SUBCONTRACTS

a. The Contractor shall not execute an agreement with any subcontractor or permit any subcontractor to perform any work included in this Contract until he has submitted a non-collusion affidavit from the subcontractor in substantially the form shown below and has received written approval of such subcontractor from the Local Public Agency.

NON-COLLUSION AFFIDAVIT OF SUBCONTRACTOR

| State of | | |
|---|-----------------------------------|---------------------------|
| County of | | • |
| | , being first d | uly sworn, deposes and |
| says that: | | , . |
| (1) He is | of | |
| hereinafter referred to as the "Subcor | | |
| (2) He is fully informed respect | ing the preparation and content | ts of the subcontractor's |
| Proposal submitted by the subcontract | or to | |
| the Contractor, for certain work in c | onnection with the | Contract |
| pertaining to the Project in | (C | ity or County and State) |
| (3) Such subcontractor's Propose | al is genuine and is not a collu | sive or sham proposal: |
| (4) Neither the subcontractor n | or any of its officers, partners, | owners, agents, re- |
| presentatives, employees or parties in | n interest, including this affian | t, has in any way col- |
| luded, conspired, connived, or agree | ed, directly or indirectly, with | any other Bidder, firm |
| or person to submit a collusive or sha | m Proposal in connection with | such Contract or to re- |
| frain from submitting a Proposal in co | nnection with such Contract, c | or has in any manner, |
| directly or indirectly, sought by unlo | wful agreement or connivance | with any other Bidder, |
| firm or person to fix the price or pric | es in said subcontractor's Propo | sal, or to secure through |
| collusion, conspiracy, connivance or | r unlawful agreement any advar | ntage against the |
| | (Local Public Agency) o | or any person interested |
| in the proposed Contract: and | (| |

(5) The price or prices quoted in the subcontractor's Proposal are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

(Signed)

| Subscribe | ed and sworn to before me | • | |
|-----------|---------------------------|------|--|
| this | day of | . 19 | |
| | Title | | |
| My comm | nission expires | , 19 | |

- b. No proposed subcontractor shall be disapproved by the Local Public Agency except for cause.
- c. The Contractor shall be as fully responsible to the Local Public Agency for the acts and omissions of his subcontractors, and of persons either directly or indirectly employed by them, as he is for the acts and omissions of persons directly employed by him.
- d. The Contractor shall cause appropriate provision to be inserted in all subcontracts relative to the work to require compliance by each subcontractor with the applicable provisions of the Contract for the Improvements embraced in the Contract Documents.
- e. Nothing contained in the Contract shall create any contractual relation between any subcontractor and the Local Public Agency.

104. OTHER CONTRACTS

The Department of Parks and Public Property may award, or may have awarded other contracts for additional work, and the Contractor shall cooperate fully with such other Contractors, by scheduling his own work with that to be performed under other Contracts as may be directed by the Department of Parks and Public Property. The Contractor shall not commit or permit any act which will interfere with the performance of work by any other Contractor as scheduled.

105. FITTING AND COORDINATION OF THE WORK

The Contractor shall be responsible for the proper fitting of all work and for the coordination of the operations of all trades, subcontractors, or material men engaged upon this Contract. He shall be prepared to guarantee to each of his subcontractors the locations and measurements which they may require for the fitting of their work to all surrounding work.

106. MUTUAL RESPONSIBILITY OF CONTRACTORS

If, through acts or neglect on the part of the Contractor, any other Contractor or any subcontractor shall suffer loss or damage on the work, the Contractor shall settle with such other Contractor or subcontractor by agreement or arbitration, if such other Contractor of subcontractor will so settle. If such other Contractor or subcontractor shall assert any claim against the Department of Parks and Fublic Property on account of any damage alleged to have been so sustained, the Department of Parks and Public Property will notify this Contractor, who shall defend at his own expense any suit based upon such claim, and if any judgment—or claims against the Department of Parks and Public Property shall be allowed, the Contractor shall pay or satisfy such judgment or claim and pay all costs and expenses in connection therewith.

107. PROGRESS SCHEDULE AND COST BREAKDOWN

- a. The Contractor shall submit for approval immediately after execution of the Agreement, a carefully prepared Progress Schedule, showing the proposed dates of starting and completing each of the various sections of the work, the anticipated monthly payments to become due the Contractor, and the accumulated percent of progress each month.
- b. The Contractor shall submit to the Local Public Agency a breakdown of his estimated cost of all work, so arranged and itemized as to meet the approval of the Local Public Agency. This breakdown shall be submitted promptly after execution of the agreement and before any payment is made to the Contractor for the work performed under the Contract. After approval by the Local Public Agency the unit prices established in the breakdown shall be used in estimating the amount of partial payments to be made to the Contractor.

108. PAYMENTS TO CONTRACTOR

1. Partial Payments

- a. The Contractor shall prepare his requisition for partial payment as of the last day of the month and submit it, with the required number of copies, to the Engineer for his approval. The amount of the payment due the Contractor shall be determined by adding to the total value of work completed to date, the value of materials properly stored on the site and deducting (1) ten (10%) percent of the total amount, to be retained until final payment and (2) the amount of all previous payments. The total value of work completed to date shall be based upon the estimated quantities of work completed to date on each item and the unit prices established in the COST BREAKDOWN and adjusted in accordance with the value of work completed to date on approved change orders.
- b. Monthly or partial payments made by the Local Public Agency to the Contractor are moneys advanced for the purpose of assisting the Contractor to expedite the work of construction. The Contractor shall be responsible for the care and protection of all materials and work upon which payments have been made until final acceptance of such work and materials by the Local Public Agency. Such payments shall not constitute a waiver of the right of the Local Public Agency to require the fulfillment of all terms of the Contract and the delivery of all improvements embraced in this Contract complete and satisfactory to the Local Public Agency in all details.

2. Final Payment

- a. After final inspection and acceptance by the Local Public Agency of all work under the Contract, the Contractor shall prepare his requisition for final payment. The total amount of the final payment due the Contractor under this Contract shall be the lump-sum shown in the Agreement, plus or minus any change orders approved by the Local Public Agency, less all previous payments. Final payment to the Contractor shall be made subject to his furnishing the Local Public Agency with a release in satisfactory form of all claims against the Local Public Agency arising under and by virtue of his contract, other than such claims, if any, as may be specifically excepted by the Contractor from the operation of the release as provided under Section 114 hereof.
- b. The Local Public Agency, before paying the final estimate, may require the Contractor to furnish releases or receipts from all subcontractors having performed any work and all persons having supplied materials, equipment (installed on the Project) and services to the Contractor, if the Local Public Agency deems the same necessary in order to protect its interest. The Local Public Agency, however, may if it deems such action advisable, make payment in part or in full to the Contractor without requiring the furnishing of such releases or receipts and any payments so made shall in nowise impair the obligations of any surety or sureties furnished under this Contract.

c. Withholding of any amount due the Local Public Agency under Section 402 entitled "Liquidated Damages", under SPECIAL CONDITIONS, shall be deducted from the final payment due the Contractor.

3. Withholding Payments

The Local Public Agency may withhold from any payment otherwise due the Contractor so much as may be necessary to protect the Local Public Agency and if it so elects may also withhold any amounts due from the Contractor to any subcontractors or material dealers, for work performed or material furnished by them. The foregoing provisions shall be construed solely for the benefit of the Local Public Agency and will not require the Local Public Agency to determine or adjust any claims or disputes between the Contractor and his subcontractors or material dealers, or to withhold any moneys for their protection unless the Local Public Agency elects to do so. The failure or refusal of the Local Public Agency to withhold any moneys from the Contractor shall in nowise impair the obligations of any surety or sureties under any bond or bonds furnished under this Contract.

4. Payments Subject to Submission of Certificates

Each payment to the Contractor by the Local Public Agency shall be made subject to submission by the Contractor of all written certifications required of him and his subcontractors by the Federal Labor Standards Provisions bound herein.

109. CHANGES IN THE WORK

- a. The Local Public agency may make changes in the scope of the work required to be performed by the Contractor under the Contract or making additions thereto, or by omitting work therefrom, without invalidating the Contract, and without relieving or releasing the Contractor from any of his obligations under the Contract or any guarantee given by him pursuant to the Contract provisions, and without affecting the validity of the guaranty bonds, and without relieving or releasing the surety or sureties of said bonds. All such work shall be executed under the terms of the original Contract unless it is expressly provided otherwise.
- b. Except for the purpose of affording protection against any emergency endangering health, life, limb or property, the Contractor shall make no change in the materials used or in the specified manner of constructing and/or installing the Improvements or supply additional labor, services or materials beyond that actually required for the execution of the Contract, unless in pursuance of a written order from the Local Public Agency authorizing the Contractor to proceed with the change. No claim for an adjustment of the Contract Price, will be valid unless so ordered.

- c. If applicable unit prices are contained in the Agreement (established as a result of either a unit price bid or a Supplemental Schedule of Unit Prices) the Local Public Agency may order the Contractor to proceed with desired changes in the work, the value of such changes to be determined by the measured quantities involved and the applicable unit prices specified in the Contract; provided that in case of a unit price contract the net value of all changes does not increase or decrease the original total amount shown in the Agreement by more than twenty-five (25%) percent in accordance with the Section entitled Unit Prices, under INSTRUCTIONS TO BIDDERS.
- d. If applicable unit prices are not contained in the Agreement or if the total net change increases or decreases the total Contract Price more than twenty-five (25%) percent, the Local Public Agency shall, before ordering the Contractor to proceed with desired changes, request an itemized proposal from him covering the work involved in the change after which the procedure shall be as follows:
 - (1) If the proposal is acceptable the Local Public Agency will prepare the change order in accordance therewith for acceptance by the Contractor and
 - (2) If the proposal is not acceptable and prompt agreement between the two parties cannot be reached, the Local Public Agency may order the Contractor to proceed with the work on a cost-plus-limited basis. A cost-plus-limited basis is defined as the net cost of the Contractor's labor, materials, and insurance plus fifteen (15%) percent of said net cost to cover overhead and profit, the total cost not to exceed a specified limit.
 - e. Each change order shall include in its final form:
 - (1) A detailed description of the change in the work.
 - (2) The Contractor's proposal (if any) or a conformed copy thereof.
 - (3) A definite statement as to the resulting change in the contract price and/or time.
 - (4) The statement that all work involved in the change shall be performed in accordance with contract requirements except as modified by the change order.

110. PREROGATIVE OF LPA

It may be the intent of the Local Public Agency to expend a certain fixed sum, within close limits, on any contract. The right is reserved therefore, to increase the extent of the work, if bids be lower than anticipated, or to decrease the extent of work if bids be high. Any increase of work, under this clause, will be of the same nature as that bid on. The increase or diminution mentioned in Paragraph 109 above, is at the option of

the Local Public Agency, and is to be made for the best interest of the Local Public Agency; the increase or diminution mentioned just above in this Paragraph, on account of low or high bids, may be made in addition to the other, and independent of it.

If the Local Public Agency shall decide to exercise the rights reserved in this Paragraph No. 110, it must so notify the Contractor, within five (5) consecutive calendar days after the date of the signing of the Contract and must, at the same time, inform him as to the amount of the certain fixed sum which the Local Public Agency intends to expend on this Contract.

111. CLAIMS FOR EXTRA COST

- a. If the Contractor claims that any instructions by Drawings or otherwise involve extra cost or extension of time, he shall, within ten (10) days after the receipt of such instructions, and in any event before proceeding to execute the work, submit his protest thereto in writing to the Local Public Agency, stating clearly and in detail the basis of his objections. No such claim will be considered unless so made.
- b. Claims for additional compensation for extra work, due to alleged errors in ground elevations, contour lines, or bench marks, will not be recognized unless accompanied by certified survey data, made prior to the time the original ground was disturbed, clearly showing that errors exist which resulted, or would result, in handling more material, or performing more work, than would be reasonably estimated from the Drawings and maps issued.
- c. Any discrepancies which may be discovered between actual conditions and those represented by the Drawings and maps shall at once be reported to the Local Public Agency and work shall not proceed except at the Contractor's risk, until written instructions have been received by him from the Local Public Agency.
- d. If, on the basis of the available evidence, the Local Public Agency determines that an adjustment of the Contract Price and/or Time is justifiable, the procedure shall be as provided in Section 109 thereof.

112. TERMINATION: DELAYS AND LIQUIDATED DAMAGES

a. Termination of Contract. If the Contractor refuses or fails to prosecute the work with such diligence as will insure its completion within the time specified in these Contract Documents, or as modified as provided in these Contract Documents, the Local Public Agency, by written notice to the Contractor, may terminate the Contractor's right to proceed with the work. Upon such termination, the Local Public Agency may take over the

work and prosecute the same to completion, by contract or otherwise, and the Contractor and his sureties shall be liable to the Local Public Agency for any additional cost incurred by the Local Public Agency in its completion of the work and they shall also be liable to the Local Public Agency for liquidated damages for any delay in the completion of the work as provided below. If the Contractor's right to proceed is so terminated, the Local Public Agency may take possession of and utilize in completing the work such materials, tools, equipment, and plant as may be on the site of the work and necessary therefor.

- b. Liquidated Damages for Delays. If the work be not completed within the time stipulated in Section 401 hereof, including any extensions of time for excusable delays as herein provided, the Contractor shall pay to the Local Public Agency as fixed, agreed, and liquidated damages (it being impossible to determine the actual damages occasioned by the delay) for each calendar day of delay, until the work is completed, the amount as set forth in Section 402 hereof and the Contractor and his sureties shall be liable to the Local Public Agency for the amount thereof.
- c. Excusable Delays. The right of the Contractor to proceed shall not be terminated nor shall the Contractor be charged with liquidated damages for any delays in the completion of the work due:
 - (1) To any acts of the Government, including controls or restrictions upon or requisitioning of materials, equipment, tools, or labor by reason of war, National Defense, or any other national emergency;
 - (2) To any acts of the Local Public Agency;
 - (3) To causes not reasonably forseeable by the parties to this Contract at the time of the execution of the Contract which are beyond the control and without the fault or negligence of the Contractor, including but not restricted to, acts of God or of the public enemy, acts of another Contractor in the performance of some other contract with the Local Public Agency, fires, floods, epidemics, quarantine, restrictions, strikes, freight embargoes, and weather of unusual severity such as hurricanes, tornadoes, cyclones and other extreme weather conditions; and
 - (4) To any delay of any subcontractor occasioned by any of the causes specified in subparagraphs (1), (2), and (3) of this Paragraph "C".

Provided, however, that the Contractor promptly notify the Local Public Agency within ten (10) days in writing of the cause of the delay. Upon receipt of such notification the Local Public Agency shall ascertain the facts and the cause and extent of delay. If, upon the basis of the facts and the terms of this Contract, the delay is properly excusable, the Local Public Agency shall extend the time for completing the work for a period of time commensurate with the period of excusable delay.

113. ASSIGNMENT OR NOVATION

The Contractor shall not assign or transfer, whether by an assignment or novation any of its rights, duties, benefits, obligations, liabilities, or responsibilities under this Contract without the written consent of the Local Public Agency; provided that assignments to banks, trust companies, or other financial institutions may be made without the consent of the Local Public Agency. No assignment or novation of this Contract shall be valid unless the assignment or novation expressly provides that the assignment of any of the Contractor's rights or benefits under the Contract is subject to a prior lien for labor performed, services rendered, and materials, tools, and equipment supplied for the performance of the work under this Contract in favor of all persons, firms, or corporations rendering such labor or services or supplying such materials, tools, or equipment.

114. DISPUTES

- a. All disputes arising under this Contract or its interpretation except those disputes covered by FEDERAL LABOR-STANDARDS PROVISIONS under GENERAL CONDITIONS, PART II, whether involving law or fact or both, or extra work, and all claims for alleged breach of Contract shall within ten (10) days of commencement of the dispute be presented by the Contractor to the Local Public Agency for decision. All papers pertaining to claims shall be filed in quadruplicate. Such notice need not detail the amount of the claim but shall state the facts surrounding the claim in sufficient detail to identify the claim, together with its character and scope. In the meantime the Contractor shall proceed with the work as directed. Any claim not presented within the time limit specified this paragraph shall be deemed to have been waived, except that if the claim is of a continuing character and notice of the claim is not given within ten (10) days of its commencement, the claim will be considered only for a period commencing ten (10) days prior to the receipt by the Local Public Agency of notice thereof.
- b. The Contractor shall submit in detail his claim and his proof thereof. Each decision by the governing body of the Local Public Agency will be in writing and will be mailed to the Contractor by registered or certified mail, return receipt requested, directed to his last known address.
- c. If the Contractor does not agree with any decision of the Local Public Agency, he shall in no case allow the dispute to delay the work but shall notify the Local Public Agency promptly that he is proceeding with the work under protest and he may then except the matter in question from the final release.

115. TECHNICAL SPECIFICATIONS AND DRAWINGS

Anything mentioned in the Technical Specifications and not shown on the Drawings or shown on the Drawings and not mentioned in the Technical Specifications, shall be of like effect as if shown on or mentioned in both. In case of difference between Drawings and Technical Specifications, the Technical Specifications shall govern. In case of any discrepancy in Drawings or Technical Specifications, the matter shall be immediately submitted to the Local Public Agency, without whose decision, said discrepancy shall not be adjusted by the Contractor, save only at his own risk and expense.

116. REQUESTS FOR SUPPLEMENTARY INFORMATION

It shall be the responsibility of the Contractor to make timely requests of the Local Public Agency for any additional information not already in his possession which should be furnished by the Local Public Agency under the terms of this Contract, and which he will require in the planning and execution of the work. Such requests may be submitted from time to time as the need is approached, but each shall be filed in ample time to permit appropriate action to be taken by all parties involved so as to avoid delay. Each request shall be in writing, and list the various items and the latest date by which each will be required by the Contractor. The first list shall be submitted within two (2) weeks after Contract award and shall be as complete as possible at that time. The Contractor shall, if requested, furnish promptly any assistance and information the Engineer may require in responding to these requests of the Contractor. The Contractor shall be fully responsible for any delay in his work or to others arising from his failure to comply fully with the provisions of this Section.

117. MATERIALS AND WORKMANSHIP

- a. Unless otherwise specifically provided for in the Technical Specifications, all workmanship, equipment, materials and articles incorporated in the work shall be new and the best grade of the respective kinds for the purpose. Where equipment, materials, articles or workmanship are referred to in the Technical Specifications as "equal to" any particular standard, the Engineer shall decide the question of equality.
- b. The Contractor shall furnish to the Local Public Agency for approval the manufacturer's detailed specifications for all machinery, mechanical and other special equipment, which he contemplates installing together with full information as to type, performance characteristics, and all other pertinent information as required, and shall likewise submit for approval as required full information concerning all other materials or articles which he proposes to incorporate in the work. (See Section 118 hereof.)

- c. Machinery, mechanical and other equipment, materials or articles installed or used without such prior approval shall be at the risk of subsequent rejection.
- d. Materials specified by reference to the number or symbol of a specific standard such as an A.S.T.M. Standard, a Federal Specification or other similar standard, shall comply with requirements in the latest revision thereof and any amendment or supplement thereto in effect on the date of the Invitation for Bids, except as limited to type, class or grade, or modified in such reference. The standards referred to, except as modified in the Technical Specifications shall have full force and effect as though printed therein.
- e. The Local Public Agency may require the Contractor to dismiss from the work such employee or employees as the Local Public Agency or the Engineer may deem incompetent, or careless, or insubordinate.

118. SAMPLES, CERTIFICATES AND TESTS

a. The Contractor shall submit all material or equipment samples, certificates, affidavits, etc., as called for in the Contract Documents or required by the Engineer promptly after award of the Contract and acceptance of the Contractor's bond. No such material or equipment shall be manufactured or delivered to the site, except at the Contractor's own risk, until the required samples or certificates have been approved in writing by the Engineer. Any delay in the work caused by late or improper submission of samples or certificates for approval shall not be considered just cause for an extension of the Contract Time.

Each sample submitted by the Contractor shall carry a label giving the name of the Contractor, the project for which it is intended, and the name of the producer. The accompanying certificate or letter from the Contractor shall state that the sample complies with Contract requirements, shall give the name and brand of the product, its place of origin, the name and address of the producer and all specifications or other detailed information which will assist the Engineer in passing upon the acceptability of the sample promptly. It shall also include the statement that all materials or equipment furnished for use in the project will comply with the samples and/or certified statements.

b. Approval of any materials shall be general only and shall not constitute a waiver of the Local Public Agency's right to demand full compliance with Contract requirements. After actual deliveries, the Engineer will have such check tests made as he deems necessary in each instance and may reject materials and equipment and accessories for cause, even though such materials and articles have been given general approval. If materials, equipment or accessories which fail to meet check tests have been incorporated in the work, the Engineer will have the right to cause their removal and replacement by proper materials or to demand and secure such reparation by the Contractor as is equitable.

- c. Except as otherwise specifically stated in the Contract, the cost of sampling and testing will be divided as follows:
 - (1) The Contractor shall furnish without extra cost, including packing and delivery charges, all samples required for testing purposes, except those samples taken on the project by the Engineer;
 - (2) The Contractor shall assume all costs of re-testing materials which fail to meet Contract requirements;
 - (3) The Contractor shall assume all costs of testing materials offered in substitution for those found deficient; and
 - (4) The Local Public Agency will pay all other expenses.

119. PERMITS AND CODES

a. The Contractor shall give all notices required by and comply with all applicable laws, ordinances, and codes of the Local Government. All construction work and/or utility installations shall comply with all applicable ordinances, and codes including all written waivers. Before installing any work, the Contractor shall examine the Drawings and Technical Specifications for compliance with applicable ordinances and codes and shall immediately report any discrepancy to the Local Public Agency. Where the requirements of the Drawings and Technical Specifications fail to comply with such applicable ordinances or codes, the Local Public Agency will adjust the Contract by Change Order to conform to such ordinances or codes (unless waivers in writing covering the difference have been granted by the governing body or department) and make appropriate adjustment in the Contract Price or stipulated unit prices.

Should the Contractor fail to observe the foregoing provisions and proceed with the construction and/or install any utility at variance with applicable ordinance or code, including any written waivers (notwithstanding the fact that such installation is in compliance with the Drawings and Technical Specifications), the Contractor shall remove such work without cost to the Local Public Agency, but a Change Order will be issued to cover only the excess cost the Contractor would have been entitled to receive if the change had been made before the Contractor commenced work on the items involved.

b. The Contractor shall at his own expense, secure and pay to the appropriate department of the Local Government the fees or charges for all permits for street pavement, sidewalks, sheds, removal of abandoned water taps, sealing of house connection drains, pavements cuts, buildings, electrical, plumbing, water, gas and sewer permits required by the local regulatory body or any of its agencies.

c. The Contractor shall comply with applicable local laws and ordinances governing the disposal of surplus excavation, materials, debris and rubbish on or off the Project Area and commit no trespass on any public or private property in any operation due to or connected with the Improvements embraced in this Contract.

120. CARE OF WORK

- a. The Contractor shall be responsible for all damages to person or property that occur as a result of his fault or negligence in connection with the prosecution of the work and shall be responsible for the proper care and protection of all materials delivered and work performed until completion and final acceptance, whether or not the same has been covered in whole or in part by payments made by the Local Public Agency.
- b. The Contractor shall provide sufficient competent watchmen, both day and night, including Saturdays, Sundays, and holidays, from the time the work is commenced until final completion and acceptance.
- c. In an emergency affecting the safety of life, limb or property, including adjoining property, the Contractor, without special instructions or authorization from the Local Public Agency, is authorized to act at his discretion to prevent such threatened loss or injury, and he shall so act. He shall likewise act if instructed to do so by the Local Public Agency. Any compensation claimed by the Contractor on account of such emergency work will be determined by the Local Public Agency as provided in Section 109 hereof.
- d. The Contractor shall avoid damage as a result of his operations to existing sidewalks, streets, curbs, pavements, utilities (except those which are to be replaced or removed), adjoining property, etc. and he shall at his own expense completely repair any damage thereto caused by his operations.
- e. The Contractor shall shore up, brace, underpin, secure, and protect as may be necessary, all utilities, and all foundations and other parts of existing structures; adjacent to, adjoining, and in the vicinity of the site, which may be in any way affected by the excavations or other operations connected with the construction of the Improvements embraced in this Contract. The Contractor shall be responsible for the giving of any and all required notices to any adjoining or adjacent property owner or other party before the commencement of any work. The Contractor shall indemnify and save harmless the Local Public Agency from any damages on account of settlements or the loss of lateral support of adjoining property or utilities and from all loss or expense and all damages for which the Local Public Agency may become liable in consequence of such injury or damage to adjoining and adjacent structures or utilities and their premises.

121. ACCIDENT PREVENTION

- a. The Contractor shall exercise proper precaution at all times for the protection of persons and property and shall be responsible for all damages to persons or property, either on or off the site, which occur as a result of his prosecution of the work. The safety provisions of applicable laws and building and construction codes shall be observed and the Contractor shall take or cause to be taken such additional safety and health measures as the Local Public Agency may determine to be reasonably necessary. Machinery, equipment and all hazards shall be guarded in accordance with the safety provisions of the "Manual of Accident Prevention in Construction" published by the Associated General Contractors of America, Inc., to the extent that such provisions are not in conflict with applicable local laws.
- b. The Contractor shall maintain an accurate record of all cases of death, occupational disease, or injury requiring medical attention or causing loss of time from work, arising out of and in the course of employment on work under this Contract. The Contractor shall promptly furnish the Local Public Agency with reports concerning these matters.
- c. The Contractor shall indemnify and save harmless the Local Public Agency from any claims for damages resulting from property damage, personal injury and/or death suffered or alleged to have been suffered by any person as a result of any work conducted under this Contract.

122. SANITARY FACILITIES

The Contractor shall furnish, install, and maintain ample sanitary facilities for the workmen. As the needs arise, a sufficient number of enclosed temporary toilets shall be conveniently placed as required by the sanitary codes of the State and Local Government. Drinking water shall be provided from an approved source, so piped or transported as to keep it safe and fresh and served from single service containers or satisfactory types of sanitary drinking stands or fountains. All such facilities and services shall be furnished in strict accordance with existing and governing health regulations.

123. USE OF PREMISES

a. The Contractor shall confine his equipment, storage of materials, and construction operations to the Contract Limits as shown on the Drawings and as prescribed by ordinances or permits, or as may be desired by the Local Public Agency, and shall not unreasonably encumber the site or public rights of way with his materials and construction equipment.

b. The Contractor shall comply with all reasonable instructions of the Local Public Agency and the ordinances and codes of the Local Government, regarding signs, advertising, traffic, fires, explosives, danger signals, and barricades.

124. REMOVAL OF DEBRIS, CLEANING, ETC.

The Contractor shall, periodically or as directed during the progress of the work, remove and legally dispose of all surplus excavated material and debris, and keep the Project Area and public rights of way reasonably clear. Upon completion of the work, he shall remove all temporary construction facilities, debris and unused materials provided for the work, and put the whole site of the work and public rights of way in a neat and clean condition. Trash burning on the site of the work will be subject to prior approval of the Local Public Agency and existing State and local regulations.

125. INSPECTION

- a. All materials and workmanship shall be subject to inspection, examination, or test by the Local Public Agency and the Engineer at any and all times during manufacture or construction and at any and all places where such manufacture or construction is carried on. The Local Public Agency shall have the right to reject defective material and workmanship or require its correction. Unacceptable workmanship shall be satisfactorily corrected. Rejected materials shall be promptly segregated and removed from the Project Area and replaced with materials of specified quality without charge therefor. If the Contractor fails to proceed at once with the correction of rejected workmanship or defective material, the Local Public Agency may by contract or otherwise have the defects remedied or rejected materials removed from the Project Area and charge the cost of the same against any moneys which may be due the Contractor, without prejudice to any other rights or remedies of the Local Public Agency.
- b. The Contractor shall furnish promptly all materials reasonably necessary for any tests which may be required. (See Section 118 hereof.) All tests by the Local Public Agency will be performed in such manner as nor to delay the work unnecessarily and will be made in accordance with the provisions of the Technical Specifications.
- c. The Contractor shall notify the Local Public Agency sufficiently in advance of backfilling or concealing any facilities to permit proper inspection. If any facilities are concealed without approval or consent of the Local Public Agency, the Contractor shall uncover for inspection and recover such facilities all at his own expense, when so requested by the Local Public Agency.

Should it be considered necessary or advisable by the Local Public Agency at any time before final acceptance of the entire work to make an examination of work already completed by uncovering the same, the Contractor shall on request promptly furnish all necessary facilities, labor, and material. If such work is found to be defective in any important or essential respect, due to fault of the Contractor or his subcontractor, the Contractor shall defray all the expenses of such examination and of satisfactory reconstruction. If, however, such work is found to meet the requirements of the Contract, the actual cost of labor and material necessarily involved in the examination and replacement, plus fifteen (15%) percent of such costs to cover superintendence, general expenses and profit, shall be allowed the Contractor and he shall, in addition, if completion of the work of the entire Contract has been delayed thereby, be granted a suitable extension of time on account of the additional work involved.

.

- d. Inspection of materials and appurtenances to be incorporated in the Improvements embraced in this Contract may be at the place of production, manufacture or shipment, whenever the quantity justifies it, and such inspection and acceptance, unless otherwise stated in the Technical Specifications, shall be final, except as regards (1) latent defects, (2) departures from specific requirements of the Contract, (3) damage or loss in transit, or (4) fraud or such gross mistakes as amount to fraud. Subject to the requirements contained in the preceeding sentence, the inspection of materials as a whole or in part will be made at the Project Site.
- e. Neither inspection, testing, approval nor acceptance of the work in whole or in part, by the Local Public Agency or its agents shall relieve the Contractor or his sureties of full responsibility for materials furnished or work performed not in strict accordance with the Contract.

126. REVIEW BY LOCAL PUBLIC AGENCY

The Local Public Agency, its authorized representatives and agents and the Representative for the Secretary (as defined under GENERAL CONDITIONS, PART II) shall, at all times have access to and be permitted to observe and review all work, materials, equipment, payrolls, personnel records, employment conditions, materials invoices, and other relevant data and records pertaining to this Contract, provided, however, that all instructions and approval with respect to the work will be given to the Contractor only by the Local Public Agency through its authorized representatives or agents.

127. PRE-FINAL AND FINAL INSPECTIONS

a. When the improvements embraced in this Contract are substantially completed, the Contractor shall notify the Engineer in writing, that the work will be ready for Pre-Final Inspection on a definite date which shall be stated in such notice. Such notice shall be given at least ten (10) days prior to the date stated for Pre-Final Inspection. If the Engineer determines that the Status of the Improvements is as represented, he will make the arrangements necessary to have the Pre-Final Inspection commenced on the date stated in such notice, or as soon thereafter as is practicable.

Upon making the Pre-Final Inspection the Engineer will prepare a written "Punch List" or list of items requiring attention or work for presentation to the Contractor. Upon receiving such written list, the Contractor shall take immediate action to correct the deficiencies, if any, and complete such work within fifteen (15) working days from receipt of such written list.

b. When all of the deficiencies from the <u>Pre-Final Inspection</u> have been corrected, the Contractor shall advise the Engineer in writing, that the work has been completed and requesting a <u>Final Inspection</u> on a definite date which shall be stated in such notice. The notice shall be given at least five (5) working days prior to the date stated for <u>Final Inspection</u>. The Engineer shall make arrangements to have the <u>Final Inspection</u> made on the date stated in the notice, or as soon thereafter as is practicable.

128. DEDUCTION FOR UNCORRECTED WORK

If the Local Public Agency deems it not expedient to require the Contractor to correct work not done in accordance with the Contract Documents, an equitable deduction from the Contract Price will be made by agreement between the Contractor and the Local Public Agency and subject to settlement, in case of dispute, as herein provided.

129. INSURANCE

- a. The Contractor shall carry or require that there be carried Workmen's Compensation Insurance for all his employees and those of his subcontractors engaged in work at the site, in accordance with State or Territorial Workmen's Compensation Laws.
- b. The Contractor shall carry or require that there be carried a Comprehensive General Liability Policy with a limit of \$500,000.00 for all damages, including damages for care and loss of services, becasue of bodily injury sustained by one or more persons as a result of any one occurrence; such insurance shall cover the use of all equipment, including but not limited to excavating machinery, trenching machines, cranes, hoists, rollers, concrete mixers, and motor vehicles, in the construction of the Improvements embraced in this Contract.
- c. The Contractor shall carry, during the life of the Contract, Property Damage Insurance with a limit of \$100,000.00 for all damages because of all property damage sustained by one or more persons or organizations as the result of any one occurrence and, subject to the foregoing limit, an aggregate limit of \$300,000.00 for all damages which might arise from operations under the Contract.
- d. The Contractor shall carry, during the life of the Contract, Builders Risk Insurance in an amount equal to the value of his Contract.
- e. Before commencing work, the Contractor shall submit evidence of the coverage required above to the Local Public Agency for review and approval. The policies shall be scheduled on approved forms to be supplied by the Local Public Agency. The Local Public Agency will, in writing, identify the policies and indicate its approval or disapproval. New Policies from other companies shall be provided in place of those disapproved. Such insurance shall be carried with financially responsible insurance companies, licensed in the State and approved by the Local Public Agency, and shall be kept in force until the Contractor's work is accepted by the Local

Public Agency. Contracts of insurance (covering all operations under this Contract) which expire before the Contractor's work is accepted by the Local Public Agency shall be renewed and evidence of such renewal shall be submitted to the Local Public Agency for its approval.

130. PATENTS

The Contractor shall hold and save the Local Public Agency, its officers, and employees, harmless from liability of any nature or kind, including costs and expenses, for, or on account of, any patented or unpatented invention, process, article, or appliance manufactured or used in the performance of the Contract, including its use by the Local Public Agency, unless otherwise specifically stipulated in the Technical Specifications.

131. WARRANTY OF TITLE

No material, supplies, or equipment to be installed or furnished under this Contract shall be purchased subject to any chattel mortgage or under a conditional sale, leasepurchase or other agreement by which an interest therein or in any part thereof is retained by the seller or supplier. The Contractor shall warrant good title to all materials, supplies, and equipment installed or incorporated in the work and upon completion of all work, shall deliver the same together with all improvements and appurtenances constructed or placed thereon by him to the Local Public Agency free from any claims, liens, or charges. Neither the Contractor nor any person, firm or corporation furnishing any material or labor for any work covered by this Contract shall have any right to a lien upon any improvement or appurtenance thereon. Nothing contained in this Paragraph, however, shall defeat or impair the right of persons furnishing materials or labor to recover under any bond given by the Contractor for their protection or any rights under any law permitting such persons to look to funds due the Contractor in the hands of the Local Public Agency. The provisions of this Paragraph shall be inserted in all subcontracts and materials contracts and notice of its provision shall be given to all persons furnishing materials for the work when no formal contract is entered into for such materials.

132. GENERAL GUARANTY

Neither the final certificate of payment nor any provision in the Contract nor partial or entire use of the Improvements embraced in this Contract by the Local Public Agency or the public shall constitute an acceptance of work not done in accordance with the Contract or relieve the Contractor of liability in respect to any express warranties or responsibility for faulty materials or workmanship. The Contractor shall promptly remedy any defects in the work and pay for any damage to other work resulting therefrom which shall appear within a period of 12 months from the date of final acceptance of the work. The Local Public Agency will give notice of defective materials and work with reasonable promptness.

133. RISK OF LOSS

The Local Public Agency assumes no responsibility for the condition of property on the Project Area nor for the continuance in the condition existing at the time of issuance of the Invitation for Bids or thereafter. No adjustment of Contract Price or allowance for any change in conditions which may occur after the Invitation for Bids has been issued, will be made.

134. LIVE UTILITIES AND OTHER PROPERTY

- a. The Contractor shall assume all responsibility for damage attributable to him to any property upon, or passing through, the Project Area but excluded from the work or not owned by the Local Public Agency, such as utility lines, surface improvements, or like items.
- b. If disconnections of underground utility services are required to be made in public thoroughfares, the Contractor shall comply with all local requirements and regulations respecting the barricading of streets, the removal and restoration of pavement, and other pertinent matters.

135. SHOP DRAWINGS

- a. All required shop drawings, machinery details, layout drawings, etc. shall be submitted to the Engineer in five (5) copies for approval sufficiently in advance of requirements to afford ample time for checking, including time for correcting, resubmitting and rechecking if necessary. The Contractor may proceed, only at his own risk, with manufacture or installation of any equipment or work covered by said shop drawings, etc. until they are approved and no claim, by the Contractor, for extension of the contract time will be granted by reason of his failure in this respect.
- b. Any drawings submitted without the Contractor's stamp of approval will not be considered and will be returned to him for proper resubmission. If any drawings show variations from the requirements of the Contract because of standard shop practice or other reason, the Contractor shall make specific mention of such variation in his letter of transmittal in order that, if acceptable, suitable action may be taken for proper adjustment of contract price and/or time otherwise the Contractor will not be relieved of the responsibility for executing the work in accordance with the Contract even though the drawings have been approved.

c. If a shop drawing is in accord with the contract or involves only a minor adjustment in the interest of the Local Public Agency not involving a change in contract price or time, the Engineer may approve the drawing. The approval shall be general, shall not relieve the Contractor, from his responsibility for adherence to the contract or for any error in the drawing and shall contain in substance the following:

"The modification shown on the attached drawing is approved in the interest of the Local Public Agency to effect an improvement for the Project and is ordered with the understanding that it does not involve any change in the Contract Price or time; that it is subject generally to all Contract stipulation and covenants; and that it is without prejudice to any and all rights of the Local Public Agency under the Contract and surety bond or bonds."

d. The Engineer's approval of shop drawings is for design only and is not a complete check on the method of assembly, erection or construction. Approval shall in no way be construed as (1) permitting any departure whatsoever from the Contract Documents, except where the Contractor, in accordance with the provisions of paragraph b. of this Section, has previously notified the Engineer of such departure; (2) relieving the Contractor of full responsibility for any error in quality of materials, details, dimensions, omissions or otherwise that may exist; (3) relieving the Contractor of full responsibility for adequate field connections, erection techniques, bracing or deficiencies in strength; (4) relieving the Contractor of full responsibility for satisfactory performance of all work and coordination with the work of all subcontractors and other contractors; or (5) permitting departure from additional details or instructions previously furnished by the Engineer.

FEDERAL LABOR STANDARDS PROVISIONS

GENERAL CONDITIONS - PART II

1. APPLICABILITY

The Project or Program to which the work covered by this Contract pertains is being assisted by the United States of America and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such Federal assistance.

2. MINIMUM WAGE RATES FOR LABORERS AND MECEANICS

All laborers and mechanics employed upon the work covered by this Contract shall be paid unconditionally and not less often than once each week, and without subsequent deduction or rebate on any account (except such payroll deductions as are made mandatory by law and such other payroll deductions as are permitted by the applicable regulations issued by the Secretary of Labor, United States Department of Labor, pursuant to the Anti-Kickback Act hereinafter identified), the full amount due at time of payment computed at wage rates not less than those contained in the wage determination decision of said Secretary of Labor (a copy of which is attached and herein incorporated by reference), regardless of any contractual relationship which may be alleged to exist between the Contractor or any subcontractor and such laborers and mechanics. All laborers and mechanics employed upon such work shall be paid in cash, except that payment may be by check if the employer provides or secures satisfactory facilities approved by the Local Public Agency or Public Body for the cashing of the same without cost or expense to the employee. For the purpose of this clause, contributions made or costs reasonably anticipated under Section 1 (b) (2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of Section 5.5(a)(1)(iv) of Title 29, Code of Federal Regulations. Also for the purpose of this clause, regular contributions made or costs incurred for more than a weekly period under plans, funds, or programs, but covering the particular weekly period, are deemed to be constructively made or incurred during such weekly period.

3. UNDERPAYMENTS OF WAGES OR SALARIES

In case of underpayment of wages by the Contractor or by any subcontractor to laborers or mechanics employed by the Contractor or subcontractor upon the work covered by this Contract, the Local Public Agency or Public Body in addition to such other rights as may be afforded it under this Contract shall withhold from the Contractor, out of any payments due the Contractor, so much thereof as the Local Public

Agency or Public Body may consider necessary to pay such laborers or mechanics the full amount of wages required by this Contract. The amount so withheld may be disbursed by the Local Public Agency or Public Body, for and on account of the Contractor or the subcontractor (as may be appropriate), to the respective laborers or mechanics to whom the same is due or on their behalf to plans, funds, or programs for any type of fringe benefit prescribed in the applicable wage determination.

4. ANTICIPATED COSTS OF FRINGE BENEFITS

If the Contractor does not make payments to a trustee or other third person, he may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing fringe benefits under a plan or program of a type expressly listed in the wage determination decision of the Secretary of Labor which is a part of this Contract: Provided, however, the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program. A copy of any findings made by the Secretary of Labor in respect to fringe benefits being provided by the Contractor must be submitted to the Local Public Agency or Public Body with the first payroll filed by the Contractor subsequent to receipt of the findings.

- 5. OVERTIME COMPENSATION REQUIRED BY CONTRACT WORK HOURS AND SAFETY STANDARDS ACT (76 Stat. 357-360: Title 40 U.S.C., Sections 327-332)
- (a) Overtime requirements. No Contractor or subcontractor contracting for any part of the Contract work which may require or involve the employment of laborers or mechanics, including watchmen and guards, shall require or permit any laborer or mechanic in any workweek in which he is employed on such work to work in excess of 8 hours in any calendar day or in excess of 40 hours in such work week unless such laborer or mechanic receives compensation at a rate not less than one and one-half times his basic rate of pay for all hours worked in excess of 8 hours in any calendar day or in excess of 40 hours in such work week, as the case may be.
- (b) Violation: liability for unpaid wages liquidated damages. In the event of any violation of the clause set forth in paragraph (a), the Contractor and any subcontractor responsible therefor shall be liable to any affected employee for his unpaid wages. In addition, such Contractor and subcontractor shall be liable to the United States for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic employed in violations of the clause set forth in paragraph (a), in the sum of \$10 for each calendar day on which such employee was required or permitted to work

in excess of 8 hours or in excess of the standard workweek of 40 hours without payment of the overtime wages required by the clause set forth in paragraph (a).

- (c) <u>Withholding for liquidated damages</u>. The Local Public Agency or Public Body shall withhold or cause to be withheld, from any moneys payable on account of work performed by the Contractor or subcontractor, such sums as may administratively be determined to be necessary to satisfy any liabilities of such Contractor or subcontractor for liquidated damages as provided in the clause set forth in paragraph (b).
- (d) <u>Subcontracts</u>. The Contractor shall insert in any subcontracts the clauses set forth in paragraphs (a), (b), and (c) of this Section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts which they may enter into, together with a clause requiring this insertion in any further subcontracts that may in turn be made.

6. EMPLOYMENT OF APPRENTICES/TRAINEES

a. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen in any craft classification shall not be greater than the ratio permitted to the contractor as to his entire work force under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not a trainee as defined in subdivision (b) of this subparagraph or is not registered or otherwise employed as stated above, shall be paid the wage rate determined by the Secretary of Labor for the classification of work he actually performed. The contractor or subcontractor will be required to

furnish to the contracting officer or a representative of the Wage-Hour Division of the U.S. Department of Labor written evidence of the registration of his program and apprentices as well as the appropriate ratios and wage rates (expressed in percentages of the journeyman hourly rates), for the area of construction prior to using any apprentices on the contract work. The wage rate paid apprentices shall be not less than the appropriate percentage of the journeyman's rate contained in the applicable wage determination.

- Trainees. Except as provided in 29 CFR 5.15 trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification, by the U. S. Department of Labor, Manpower Administration, Bureau of Apprentice and Training. The ratio of trainees to journeymen shall not be greater than permitted under the plan approved by the Bureau of Apprenticeship and Training. Every trainee must be paid at not less than the rate specified in the approved program for his level of progress. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Bureau of Apprenticeship and Training shall be paid not less than the wage rate determined by the Secretary of Labor for the classification of work he actually performed. The contractor or subcontractor will be required to furnish the contracting officer or a representative of the Wage-Hour Division of the U. S. Department of Labor written evidence of the certification of his program, the registration of the trainees, and the ratios and wage rates prescribed in that program. In the event the Bureau of Apprenticeship and Training withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined. rate for the work performed until an acceptable program is approved.
- c. Equal Employment Opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

EMPLOYMENT OF CERTAIN PERSONS PROHIBITED

No person under the age of sixteen years and no person who, at the time, is serving sentence in a penal or correctional institution shall be employed on the work covered by this Contract.

8. REGULATIONS PURSUANT TO SO-CALLED "ANTI-KICKBACK ACT"

The Contractor shall comply with the applicable regulations (a copy of which is attached and herein incorporated by reference) of the Secretary of Labor, United States Department of Labor, made pursuant to the so-called "Anti-Kickback Act" of June 13, 1934 (48 Stat. 948: 62 Stat. 862; Title U.S.C., Section 874: and Title 40 U.S.C., Section 276c), and any amendments or modifications thereof, shall cause appropriate provisions to be inserted in subcontracts to insure compliance therewith by all subcontractors subject thereto, and shall be responsible for the submission of affidavits required by subcontractors thereunder, except as said Secretary of Labor may specifically provide for reasonable limitations, variations, tolerances, and exemptions from the requirements thereof.

9. EMPLOYMENT OF LABORERS OR MECHANICS NOT LISTED IN AFORESAID WAGE DETERMINATION DECISION

Any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the Contract will be classified or reclassified conformably to the wage determination by the Local Public Agency or Public Body, and a report of the action taken shall be submitted by the Local Public Agency or Public Body, through the Secretary of the United States Department of Commerce, to the Secretary of Labor, United States Department of Labor. In the event the interested parties cannot agree on the proper classification or reclassification of a particular class of laborers and mechanics to be used, the question accompanied by the recommendation of the Local Public Agency or Public Body shall be referred, through the Secretary of the United States Department of Commerce, to the Secretary of Labor, for final determination.

10. FRINGE BENEFITS NOT EXPRESSED AS HOURLY WAGE RATES

The Local Public Agency or Public Body shall require, whenever the minimum wage rate prescribed in the Contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly wage rate and the Contractor is obligated to pay cash equivalent of such a fringe benefit, an hourly cash equivalent thereof to be established. In the event the interested parties cannot agree upon a cash equivalent of the fringe benefit, the question, accompanied by the recommendation of the Local Public Agency or Public Body, shall be referred, through the Secretary of the United States Department of Commerce, to the Secretary of Labor for determination.

11. POSTING WAGE DETERMINATION DECISIONS AND AUTHORIZED WAGE DEDUCTIONS

The applicable wage poster of the Secretary of Labor, United States Department of Labor, and the applicable wage determination decisions of said Secretary of Labor with respect to the various classification of laborers and mechanics employed and to be employed upon the work covered by this Contract, and a statement showing all deductions, if any, in accordance with the provisions of this Contract, to be made from wages actually earned by persons so employed or to be employed in classifications, shall be posted at appropriate conspicuous points at the site of the work.

12. COMPLAINTS, PROCEEDINGS, OR TESTIMONY BY EMPLOYEES

No laborer or mechanic to whom the wage, salary, or other labor standards provisions of this Contract are applicable shall be discharged or in any other manner discriminated against by the Contractor or any subcontractor because such employee has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable under this Contract to his employer.

13. CLAIMS AND DISPUTES PERTAINING TO WAGE RATES

Claims and disputes pertaining to wage rates or to classifications of laborers and mechanics employed upon the work covered by this Contract shall be promptly reported by the Contractor in writing to the Local Public Agency or Public Body for referral by the latter through the Secretary of the United States Department of Commerce, to the Secretary of Labor, United States Department of Labor, whose decision shall be final with respect thereto.

14. QUESTIONS CONCERNING CERTAIN FEDERAL STATUTES AND REGULATIONS

All questions arising under this Contract which relate to the application or interpretation of (a) the aforesaid Anti-Kickback Act, (b) the Contract Work Hours and Safety Standards Act, (c) the aforesaid Davis-Bacon Act, (d) the regulations issued by the Secretary of Labor, United States Department of Labor, pursuant to said Acts, or (e) the labor standards provision of any other pertinent Federal statute, shall be referred, through the Local Public Agency or Public Body and the Secretary of the United States Department of Commerce, to the Secretary of Labor, United States Department of Labor, for said Secretary's appropriate ruling or interpretation which shall be authoritative and may be relied upon for the purposes of this Contract.

15. PAYROLLS AND BASIC PAYROLL RECORDS OF CONTRACTOR AND SUBCONTRACTORS

The Contractor and each subcontractor shall prepare his payrolls on forms satisfactory to and in accordance with instructions to be

furnished by the Local Public Agency or Public Body. The Contractor shall submit weekly to the Local Public Agency or Public Body two certified copies of all payrolls of the Contractor and of the subcontractors, it being understood that the Contractor shall be responsible for the submission of copies of payrolls of all subcontractors. Each such payroll shall contain the "Weekly Statement of Compliance" set forth in Section 3.3 of Title 29, Code of Federal Regulations. The payrolls and basic payroll records of the Contractor and each subcontractor covering all laborers and mechanics employed upon the work covered by this Contract shall be maintained during the course of the work and preserved for a period of 3 years thereafter. Such payrolls and basic payroll records shall contain the name and address of each such employee, his correct classification, rate of pay (including rates of contributions or costs anticipated of the types described in Section 1(b)(2) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made, and actual wages paid. In addition, whenever the Secretary of Labor has found under Section 5.5(a)(1)(iv) of Title 29, Code of Federal Regulations, that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis-Bacon Act, the Contractor or subcontractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. The Contractor and each subcontractor shall make his employment records with respect to persons employed by him upon the work covered by this Contract available for inspection by authorized representatives of the Secretary of the United States Department of Commerce, the Local Public Agency or Public Body, and the United States Department of Labor. Such representatives shall be permitted to interview employees of the Contractor or of any subcontractor during working hours on the job.

16. SPECIFIC COVERAGE OF CERTAIN TYPES OF WORK BY EMPLOYEES

The transporting of materials and supplies to or from the site of the Project or Program to which this Contract pertains by the employees of the Contractor or of any subcontractor, and the manufacturing or furnishing of materials, articles, supplies, or equipment on the site of the Project or Program to which this Contract pertains by persons employed by the Contractor or by any subcontractor, shall, for the purposes of this Contract, and without limiting the generality of the foregoing provisions of this Contract, be deemed to be work to which these Federal Labor Standards Provisions are applicable.

17. INELIGIBLE SUBCONTRACTORS

The Contractor shall not subcontract any part of the work covered by this contract or permit subcontracted work to be further subcontracted without the Local Public Agency's or Public Body's prior written approval of the subcontractor. The Local Public Agency or Public Body will not approve any subcontractor for work covered by this Contract who is at the time ineligible under the provisions of any applicable regulations issued by the Secretary of Labor, United States Department of Labor, or the Secretary of the United States Department of Commerce, to receive an award of such subcontract.

18. PROVISIONS TO BE INCLUDED IN CERTAIN SUBCONTRACTS

The Contractor shall include or cause to be included in each subcontract covering any of the work covered by this Contract, provisions which are consistent with these Federal Labor Standards Provisions and also a clause requiring the subcontractors to include such provisions in any lower tier subcontracts which they may enter into, together with a clause requiring such insertion in any further subcontracts that may in turn be made.

19. BREACH OF FOREGOING FEDERAL LABOR STANDARDS PROVISIONS

In addition to the causes for termination of this Contract as herein elsewhere set forth, the Local Public Agency or Public Body reserves the right to terminate this Contract if the Contractor or any subcontractor whose subcontract covers any of the work covered by this Contract shall breach any of these Federal Labor Standards Provisions. A breach of these Federal Labor Standards Provisions may also be grounds for debarment as provided by the applicable regulations issued by the Secretary of Labor, United States Department of Labor.

MINIMUM WAGE RATES FOR LABORERS AND MECHANICS

See attached Notices for Wage Rates (bound at end of specifications).

GENERAL CONDITIONS - PART II ATTACHMENT

ATTACHMENT TO FEDERAL LABOR STANDARDS PROVISIONS

SO-CALLED "ANTI-KICKBACK ACT" AND REGULATIONS PROMULGATED PURSUANT THERETO BY THE SECRETARY OF LABOR, UNITED STATES DEPARTMENT OF LABOR

TITLE 18, U.S.C., section 874

(Replaces section 1 of the Act of June 13, 1934 (48 Stat. 948, 40 U.S.C., sec. 276b) pursuant to the Act of June 25, 1948, 62 Stat. 862)

KICKBACKS FROM PUBLIC-WORKS EMPLOYEES

Whoever, by force, intimidation, or threat of procuring dismissal from employment, or by any other manner whatsoever induces any person employed in the construction, prosecution, completion or repair of any public building, public work,
or building or work financed in whole or in part by loans or grants from the United States, to give up any part of the compensation to which he is entitled under his contract of employment, shall be fined not more than \$5,000 or imprisoned not
more than five years, or both.

SECTION 2 OF THE ACT OF JUNE 13, 1934, AS AMENDED (48 Stat. 948, 62 Stat. 862, 63 Stat. 108, 72 Stat. 967, 40 U.S.C., ∞c. 276c)

The Secretary of Labor shall make reasonable regulations for contractors and subcontractors engaged in the construction, prosecution, completion or repair of public buildings, public works or buildings or works financed in whole or in part by loans or grants from the United States, including a provision that each contractor and subcontractor shall furnish weekly a statement with respect to the wages paid each employee during the preceding week. Section 1001 of Title 18 (United States Code) shall apply to such statements.

... x x x ...

Pursuant to the aforesaid Anti-Rickback Act, the Secretary of Labor. United States Department of Labor, has promulgated the regulations hereinafter set forth, which regulations are found in Title 29, Subtitle A. Code of Federal Regulations, Part 3. The term "this part," as used in the regulations hereinafter set forth, refers to Part 3 last above mentioned. Said regulations are as follows:

TITLE 29 - LABOR

Subtitle A - Office of the Secretary of Labor

PART 3-CONTRACTORS AND SUBCONTRACTORS ON PUBLIC BUILDING OR PUBLIC WORK FINANCED IN WHOLE OR IN PART BY LOANS OR GRANTS FROM THE UNITED STATES

Section 3.1 Purpose and scope.

This part prescribes "anti-kickback" regulations under section 2 of the Act of June 13, 1934, as amended (40 U.S.C. 276c), popularly known as the Copeland Act. This part applies to any contract which is subject to Federal wage standards and which is for the construction, prosecution, completion, or repair of public buildings, public works or buildings or works financed in whole or in part by loans or grants from the United States. The part is intended to aid in the enforcement of the minimum wage provisions of the Davis-Bacon Act and the various statutes dealing with Federally-assisted construction that contain similar minimum wage provisions, including those provisions which are not subject to Reorganization Plan No. 14

(e.g., the College Housing Act of 1950, the Federal Water Pollution Control Act, and the Housing Act of 1959), and in the enforcement of the overtime provisions of the Contract Work Hours Standards Act whenever they are applicable to construction work. The part details the obligation of contractors and subcontractors relative to the weekly submission of statements regarding the wages paid on work covered thereby; sets forth the circumstances and procedures governing the making of payroll deductions from the wages of those employed on such work; and delineates the methods of payment permissible on such work.

Section 3.2 Definitions.

As used in the regulations in this part:

- (a) The terms "building" or "work" generally include construction activity as distinguished from manufacturing, furnishing of materials, or servicing and maintenance work. The terms include, without limitation, buildings, structures, and improvements of all types, such as bridges, dams, plants, highways, parkways, streets, subways, tunnels, sewers, mains, power-lines, pumping stations, railways, airports, terminals, docks, piers, wharves, ways, lighthouses, buoys, jetties, breakwaters, levees, and canals; dredging, shoring, scaffolding, drilling, blasting, excavating, clearing, and landscaping. Unless conducted in connection with and at the site of such a building or work as is described in the foregoing sentence, the manufacture or furnishing of materials, articles, supplies, or equipment (whether or not a Federal or State agency acquires title to such materials, articles, supplies, or equipment during the course of the manufacture or furnishing, or owns the materials from which they are manufactured or furnished) is not a "building" or "work" within the meaning of the regulations in this part.
- (b) The terms "construction," "prosecution," "completion," or "repair" mean all types of work done on a particular building or work at the site thereof, including, without limitation, altering, remodeling, painting and decorating, the transporting of materials and supplies to or from the building or work by the employees of the construction contractor or construction subcontractor, and the manufacturing or furnishing of materials, articles, supplies, or equipment on the site of the building or work, by persons employed at the site by the contractor or subcontractor.
- (c) The terms "public building" or "public work" include building or work for whose construction, prosecution, completion, or repair, as defined above, a Federal agency is a contracting party, regardless of whether title thereof is in a Federal agency.
- (d) The term "building or work financed in whole or in part by loans or grants from the United States" includes building or work for whose construction, prosecution, completion, or repair, as defined above, payment or part payment is made directly or indirectly from funds provided by loans or grants by a Federal agency. The term does not include building or work for which Federal assistance is limited solely to loan guarantees or insurance.
- (e) Every person paid by a contractor or subcontractor in any manner for his labor in the construction, prosecution, completion, or repair of a public building or public work or building or work financed in whole or in part by loans or grants from the United States is "employed" and receiving "wages," regardless of any contractual relationship alleged to exist between him and the real employer.
- (f) The term "any affiliated person" includes a spouse, child, parent, or other close relative of the contractor or sub-contractor; a partner or officer of the contractor or subcontractor; a corporation closely connected with the contractor or subcontractor as parent, subsidiary or otherwise, and an officer or agent of such corporation.
- (g) The term "Federal agency" means the United States, the District of Columbia, and all executive departments, independent establishments, administrative agencies, and instrumentalities of the United States and of the District of Columbia, including corporations, all or substantially all of the stock of which is beneficially owned by the United States, by the District of Columbia, or any of the foregoing departments, establishments, agencies, and instrumentalities.

Section 3.3 Weekly statement with respect to payment of wages.

(a) As used in this section, the term "employee" shall not apply to persons in classifications higher than that of laborer or mechanic and those who are the immediate supervisors of such employees.

- (b) Each contractor or subcontractor engaged in the construction, prosecution, completion, or repair of any public building or public work, or building or work financed in whole or in part by loans or grants from the United States, shall furnish each week a statement with respect to the wages paid each of its employees engaged on work covered by 29 CFR Parts 3 and 5 during the preceding weekly payroll period. This statement shall be executed by the contractor or subcontractor or by an authorized officer or employee of the contractor or subcontractor who supervises the payment of wages, and shall be on form WH 3 18, "Statement of Compliance", or on an identical form on the back of WH 317, "Payroll (For Contractors Optional Use)" or on any form with identical wording. Sample copies of WH 347 and WH 348 may be obtained from the Government contracting or sponsoring agency, and copies of these forms may be purchased at the Government Printing Offices.
 - (c) The requirements of this section shall not apply to any contract of \$2,000 or less.
- (d) Upon a written finding by the head of a Federal agency, the Secretary of Labor may provide reasonable limitations, variations, tolerances, and exemptions from the requirements of this section subject to such conditions as the Secretary of Labor may specify.
- [29 F.R. 95, Jan. 4, 1964, as amended at 33 F.R. 10186, July 17, 1968]
- Section 3.4 Submission of weekly statements and the preservation and inspection of weekly payroll records.
- (a) Each weekly statement required under § 3.3 shall be delivered by the contractor or subcontractor, within seven days after the regular payment date of the payroll period, to a representative of a Federal or State agency in charge at the site of the building or work, or, if there is no representative of a Federal or State agency at the site of the building or work, the statement shall be mailed by the contractor or subcontractor, within such time, to a Federal or State agency contracting for or financing the building or work. After such examination and check as may be made, such statement, or a copy thereof, shall be kept available, or shall be transmitted together with a report of any violation, in accordance with applicable procedures prescribed by the United States Department of Labor.
- (b) Each contractor or subcontractor shall preserve his weekly payroll records for a period of three years from date of completion of the contract. The payroll records shall set out accurately and completely the name and address of each laborer and mechanic, his correct classification, rate of pay, daily and weekly number of hours worked, deductions made, and actual wages paid. Such payroll records shall be made available at all times for inspection by the contracting officer or his authorized representative, and by authorized representatives of the Department of Labor.
- Section 3.5 Payroll deductions permissible without application to or approval of the Secretary of Labor.

Deductions made under the circumstances or in the situations described in the paragraphs of this section may be made without application to and approval of the Secretary of Labor:

- (a) Any deduction made in compliance with the requirements of Federal, State, or local law, such as Federal or State withholding income taxes and Federal social security taxes.
- (b) Any deduction of sums previously paid to the employee as a hona fide prepayment of wages when such prepayment is made without discount or interest. A "bona fide prepayment of wages" is considered to have been made only when eash or its equivalent has been advanced to the person employed in such manner as to give bim complete freedom of disposition of the advanced funds.
- (c) Any deduction of amounts required by court process to be paid to another, unless the deduction is in favor of the contractor, subcontractor or any affiliated person, or when collusion or rollaboration exists.

- (d) Any deduction constituting a contribution on behalf of the person employed to funds established by the employer or representatives of employees, or both, for the prupose of providing either from principal or income, or both, medical or hospital care, pensions or annuities on retirement, death benefits, compensation for injuries, illness, accidents, sickness, or disability, or for insurance to provide any of the foregoing, or unemployment benefits, vacation pay, savings accounts, or similar payments for the benefit of employees, their families and dependents: Provided, however, That the following standards are met: (1) The deduction is not otherwise prohibited by law; (2) it is either: (i) Voluntarily consented to by the employee in writing and in advance of the period in which the work is to be done and such consent is not a condition either for the obtaining of or for the continuation of employment, or (ii) provided for in a bona fide collective bargaining agreement between the contractor or subcontractor and representatives of its employees; (3) no profit or other benefit is otherwise obtained, directly or indirectly, by the contractor or subcontractor or any affiliated person in the form of commission, dividend, or otherwise; and (4) the deductions shall serve the convenience and interest of the employee.
- (e) Any diduction contributing toward the purchase of United States Defense Stamps and Bonds when voluntarily authorized by the employee.
- (f) Any deduction requested by the employee to enable him to repay loans to or to purchase shares in credit unions organized and operated in accordance with Federal and State credit union statutes.
- (g) Any deduction voluntarily authorized by the employee for the making of contributions to governmental or quasi-governmental agencies, such as the American Red Cross.
- (h) Any deduction voluntarily authorized by the employee for the making of contributions to Community Chests, United Givers Funds, and similar charitable organizations.
- (i) Any deductions to pay regular union initiation fees and membership dues, not including fines or special assessments: Provided, however, That a collective bargaining agreement between the contractor or subcontractor and representatives of its employees provides for such deductions and the deductions are not otherwise prohibited by law.
- (j) Any deduction not more than for the "reasonable cost" of board, lodging, or other facilities meeting the requirements of section 3(m) of the Fair Labor Standards Act of 1938, as amended, and Part 531 of this title. When such a deduction is made the additional records required under § 516.27 (a) of this title shall be kept.
- Section 3.6 Payroll deductions permissible with the approval of the Secretary of Labor.

Any contractor or subcontractor may apply to the Secretary of Labor for permission to make any deduction not permitted under § 3.5. The Secretary may grant permission whenever he finds that:

- (a) The contractor, subcontractor, or any affiliated person does not make a profit or benefit directly or indirectly from the deduction either in the form of a commission, dividend, or otherwise:
 - (b) The deduction is not otherwise prohibited by law;
- (c) The deduction is either (!) voluntarily consented to by the employee in writing and in advance of the period in which the work is to be done and such consent is not a condition either for the obtaining of employment or its continuance, or (2) provided for in a bona fide collective bargaining agreement between the contractor or subcontractor and representatives of its employees; and
 - (d) The deduction erves the convenience and interest of the employee.

Section 3.7 Applications for the approval of the Secretary of Labor.

Any application for the making of payroll deductions under § 3.6 shall comply with the requirements pre-cribed in the following paragraphs of this section:

- (a) The application shall be in writing and shall be addressed to the Secretary of Lahor.
- (b) The application shall identify the contract or contracts under which the work in question is to be performed. Permission will be given for deductions only on specific, identified contracts, except upon a showing of exceptional circumstances.
- (c) The application shall state affirmatively that there is compliance with the standards set forth in the provisions of § 3.6. The affirmation shall be accompanied by a full statement of the facts indicating such compliance.
- (d) The application shall include a description of the proposed deduction, the purpose to be served thereby, and the classes of laborers or mechanics from whose wages the proposed deduction would be made.
- (e) The application shall state the name and business of any third person to whom any funds obtained from the proposed deductions are to be transmitted and the affiliation of such person, if any, with the applicant.

Section 3.8 Action by the Secretary of Labor upon applications.

The Secretary of Labor shall decide whether or not the requested deduction is permissible under provisions of § 3.6; and shall notify the applicant in writing of his decision.

Section 3.9 Prohibited payroll deductions.

Deductions not elsewhere provided for by this part and which are not found to be permissible under § 3.6 are prohibited.

Section 3.10 Methods of payment of wages.

The payment of wages shall be by eash, negotiable instruments payable on demand, or the additional forms of compensation for which deductions are permissible under this part. No other methods of payment shall be recognized on work subject to the Copeland Act.

Section 3.11 Regulations part of contract.

All contracts made with respect to the construction, prosecution, completion, or repair of any public building or public work or building or work financed in whole or in part by loans or grants from the finited States covered by the regulations in this part shall expressly bind the contractor or subcontractor to comply with such of the regulations in this part as may be applicable. In this regard, see § 5.5 (a) of this subtitle.

NON-DISCRIMINATION & EQUAL OPPORTUNITY REQUIREMENTS

A. Commonwealth of Pennsylvania Requirements

1. Contractor shall not discriminate against any employee, applicant for employment, independent contractor or any other person because of race, color, religious creed, ancestry, national origin, age or sex.

Contractor shall take affirmative action to ensure that applicants are employed, and that employees or agents are treated during employment, without regard to their race, color, religious creed, ancestry, national origin, age or sex. Such affirmative action shall include, but is not limited to, the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selction for training.

Contractor shall post in conspicuous places, available to employees, agents, applicants for employment and other persons, a notice to be provided by the contracting agency setting forth the provisions of this non-discrimination clause.

- 2. Contractor shall in advertisements or requests for employment placed by it or on its behalf state all qualified applicants will receive consideration for employment without regard to race, color, religious creed, ancestry, national origin, age or sex.
- 3. Contractor shall send each labor union or workers' representative with which it has a collective bargaining agreement or other contract or understanding, a notice advising said labor union or workers' representative of its commitment to this non-discrimination clause. Similar notice shall be sent to every other source of recruitment regularly utilized by Contractor.
- 4. It shall be no defense to a finding of noncompliance with the Contract Compliance Regulations issued by the Pennsylvania Human Relations Commission or this non-discrimination clause that Contractor had delegated some of its employment practices to any union, training program or other source of recruitment which prevents it from meeting its obligations. However, if the evidence indicates that the Contractor was not on notice of the third-party discrimination or made a good faith effort to correct it, such factor shall be considered in mitigation in determining appropriate sanctions.
- 5. Where the practices of a union or of any training program or other source of recruitment will result in the exclusion of minority group persons, so that Contractor will be unable to meet its obligations under the Contract Compliance Regulations issued by the Pennsylvania Human Relations Commission, or this non-discrimination clause, Contractor shall then employ and fill vacancies through other non-discriminatory employment procedures.

- 6. Contractor shall comply with the Contract Compliance Regulations of the Pennsylvania Human Relations Commission, 16 Pa. Code Chapter 49 and with all laws prohibiting discrimination in hiring or employment opportunities. In the event of Contractor's noncompliance with the non-discrimination clause of this contract or with any such laws, this contract may, after hearing and adjudication, be terminated or suspended, in whole or in part, and Contractor may be declared temporarily ineligible for further Commonwealth contracts, and such other sanctions may be imposed and remedies invoked as provided by the Contract Compliance Regulations.
- 7. Contractor shall furnish all necessary employment documents and records to, and permit access to its books, records and accounts by the contracting agency and the Human Relations Commission, for purposes of investigation to ascertain compliance with the provisions of the Contract Compliance Regulations, pursuant to § 49.35 of these Regulations. If Contractor does not possess documents or records reflecting the necessary information requested, it shall furnish such information on reporting forms supplied by the contracting agency or the Commission.
- 8. Contractor shall actively recruit minority subcontractors or subcontractors with substantial minority representation among their employees.
- 9. Contractor shall include the provisions of this non-discrimination clause in every subcontract, so that such provisions will be pinding upon each subcontractor.
- 10. The terms used in this non-discrimination clause shall have the same meaning as in the Contract Compliance Regulations issued by the Pennsylvania Human Relations Commission, 16 Pa. Code Chapter 49.
- 11. Contractor obligations under this clause are liminted to the Contractor's facilities within Pennsylvania, or, where the contract is for purchase of goods manufactured outside of Pennsylvania, the facilities at which such goods are actually produced.

B. Federal Government Requirements

During the performance of this contract, the Contractor agrees as follows:

1. The Contractor will not discriminate against any employee or applicant for employment because of race, creed, color, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, creed, color, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.

- 2. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, creed, color, or national origin.
- 3. The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer, advising the labor union or workers' representative of the Contractor's commitments under Section 202 of the Executive Order No. 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- 4. The Contractor will comply with all provisions of Executive Order No. 11246 of September 24, 1965, and of the rules, regulations, and relevent orders of the Secretary of Labor.
- 5. The Contractor will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations and orders.
- 6. In the event of the Contractor's noncompliance with the non-discrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be cancelled, or terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further government contracts in accordance with procedures authorized in Executive Order No. 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- 7. The Contractor will include the provisions of Paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations or orders of the Secretary of Labor issued pursuant to Section 204 of the Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontractor or purchase order as the contracting agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, that in the event the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

FEDERAL CONTRACT COMPLIANCE REGULATIONS

Equal Employment Opportunity

NOTE: For this section of the Contract, obtain current Federal Labor Standards Provisions and Federal Contract Compliance Regulations from the appropriate State Liason Office for the Federal grantor. Further information on contract compliance requirements for this contract can be obtained from Mr. Harold Nelson, Director, Contract Compliance Division, Pennsylvania Human Relations Commission, 100 North Cameron Street, 2nd Floor, Harrisburg, PA 17101. The PHRC will be the cognizant agency for administering the CCP provisions of this contract.

ATTACHMENTS TO

GENERAL TERMS AND CONDITIONS

STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS EXECUTIVE ORDER 11248)

- 1. As used in these specifications:
- a. "Covered srea" means the geographical area described in the solicitation from which this contract resulted:
- b. "Director" means Director of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;
- c. "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.
 - d. "Minority" includes:
- (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
- Black African racial groups not of Hapanic origin;
 (ii) Hispanic tall persons of Mexican, Zuerto
 Rican, Cuban, Central or South American or other
 Spanish Culture or origin, regardless of race);
- (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands; and
- (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
- 2. Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
- 3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade which it has employees. The overall good faith performance by other Contractors or Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.
- 4 The Contractor shall implement the specific affurnative action standards provided in paragraphs 7a through p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training minority and female utilization the Contractor should reason thly be able to achieve in each construction trade in which

- it has employees in the covered area. The Contractor is expected to make substantially uniform progress toward its goals in each craft during the period specified.
- 5. Neither the previsions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications. Executive Order 11246, or the regulations promulgated pursuant thereto.
- 6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.
- 7. The Contractor shall take specific affirmative sctions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:
- b. Ensure and maintain a working environment free of harassment, intimudation, and coercinn at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
- b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available and maintain a record of the organizations' responses.
- c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractor may have taken.
- d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.

- e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.
- f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs: and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including in it any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
- g. Review, at least anually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with onsite supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
- b. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and femule news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.
- i. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
- j. Encourage present minority and female employees to recruit other minority persons and women und, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's workforce.
- k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
- I. Conduct at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for.

through appropriate training, etc., such apportunites

m Ensure that semority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.

n. Ensure that all facilities and company activities are nonsegrated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.

o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations

p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.

8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through p. The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these Specifications provided that the contractor actively participate in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contructor's minority and female workforce participation, makes a good furth effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.

9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has schieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutitized)

 The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.

11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.

12 The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any Contractor—ho

fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.

13 The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4 8

14 The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keen records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, traines, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

Equal Employment Opportunity

(1) If the contract amount is \$10,000 or less, the following conditions shall apply:

"During the performance of this Contract, the

Contractor agrees us follows:

a. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex or national origin. Such actions shall include, but not be limited to, the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination, rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Local Public Agency setting forth the provisions of this nondiscriminatory clause

b The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, reliquon, sex or national origin.

c. The Contractor will cause the foregoing provisions to be inserted in all subcontracts for any work covered by this contract so that such provisions will be brighing upon each subcontractor, provided that the foregoing provisions shall not apply to contracts or subcontracts for standard commercial another or raw may rails.

(2) If the contract a nount exceeds \$10,000, the following conditions shall apply:

CONTRACTS SUBJECT TO EXECUTIVE ORDER 11246, AS AMENDED (CONTRACTS OVER \$10,000)

Non-Discrimination Clau

During the performance of this contract, the Contractor agrees as follows:

A The Contractor will not discriminate agains any employee or applicant for employment because o race, color, religion, sex or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex or national origin. Such action shall include, but not be limited to, the following: Employment, upgrading, demotion, o: transfer, recruitment or recruitment advertising layoff or termination; rates of pay or other forms o compensation; and selection of training, including apprenticeshup. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.

B. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin

C The Contractor will send to each labor union or representative of workers with which he has a collective bargaining or other contract or understanding, a notice to be provided by the Contract Compliance Officer advising the said labor union or workers' representatives of the Contractor's commitment under this section and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

D. The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations and relevant orders of the

Secretary of Labor.

E. The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the Department and the Secretary of Lubor for purposes of investigation to ascertain compliance with such rules, regulations, and orders

F. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be cancelled, terminated or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts or federally assisted construction contract procedures authorized in Executive Order 11246 of September 24, 1965, or by rules, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

G. The Contractor will include the portion of the sentence immediately preceding paragraph A and the provisions of paragraphs A through G in every subcontract or purchase order unless exempted by rules, regulations or orders of the Secretary of Labor issued pursuant to section 201 of Executive Order 11246 of September 24, 1965, so that such provisions will be hinding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the Department may direct as a means of enforcing such provisions.

including sanctions for concompliance. Provided, however, that in concerning a contractor becomes involved in, or is tracate real with, highlion with a subcontractor or vend to a result of such direction by the Department, the contractor may request the United States to enter the such highlion to protect the interest of the limited States.

The applicant further agrees that it will be bound by the above equal opportunity chains with respect to its own employment practices when it participates in federally assumed construction work Provided, That if the applicant so participating is a State or local government, the above equal opportunity clause is not applicable to any agency, instrumentality or subdivision of such government which does not participate in work on or under the contract.

The suplicant agrees that it will assist and cooperate actively with the Department and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish the Department and the Secretary of Labor such information as they may require for the supervision of such compliance; and that it will otherwise assist the Department in the discharge of its primary responsibility for securing compliance.

The applicant further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a contractor debarred from, or who has not demonstrated eligibility for. Government contracts and federally assisted construction contracts pursuant to the Executive order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by

the Department of the Secretary of Labor pursuant to Part II, Subpart Dof the Executive order In addition, the applicant agrees that it it fails or refuses to comply with these undertakings, the Department may take any or all of the following actions: Cancel, terminate, or suspend in whole or in part this grant (contract, Ioan, insurance, guarantee), refrain from extending any further assistance to the applicant under the program with respect to which the failure or refusal occurred until satisfactory assurance of future compliance has been received from such applicant, and refer the case to the Department of Justice for appropriate legal proceedings.

COMPLIANCE WITH AIR AND WATER ACTS

This Agreement is subject to the requirements of the Clean Air Act, as amended, 42 USC 1857 et seq., the Federal Water Pollution Control Act, as amended, 33 USC 1251 et seq and the regualtions of the Environmental Protection Agency with respect thereto, at 40 CFR Part 15, as amended from time to

The Contractor and any of its subcontractors for this Project, agree to the following requirements.

A A stipulation by the contractor or subcontractors that any facility to be utilized in the performance of any non-exempt contract or subcontract is not listed on the List of Violating Facilities issued by the Environmental Protection Agency (EPA) purament to 40 CFR 15.20

B Agreement by the Contractor to comply with all the requirements of Section 114 of the Clean Air Art, as an ended, 42 USC 1857c 8c and Section 308 of the Federal Water Pollition Control Act, as an ended (33 USC 1318) relating to inspection, maintaining, entry, reports and information, as well as all other requirements specified in said Section 114 and Section 308, and all regulations and guidelines issued thereunder.

C. A stipulation that as a condition for the award of the contract prompt notice will be given of any notification received from the Director, Office of Federal Activities, EPA, indicating that a facility utilized or to be utilized for the contract is under consideration to be listed on the EPA List of Vullating Facilities.

D Agreement by the Contractor that he will include or cause to be included the criteria and other requirements in paragraph A through D of this section in every nonexempt subcontract and reporing that the contractor will take such action as the Government may direct as a means of enforcing such provision.

In no event shall any amount of the assistance provided under this (*) funding he utilized with respect to a facility which has given rise to a conviction under Section 113(cn1) of the Clean Air Act or Section 309(c) of the Federal Water Pollution Control Act

FEDERAL LABOR STANDARDS PROVISIONS

Except with respect to the rehabilitation of residential property designed for residential use for less than eight families, the Contractor, if the contract is in excess of \$2,000 for the construction prosecution, completion or repair of any building ar work, any of his subcontractors, shall comply with the (*) requirements pertaining to such contracts and the applicable requirements of the regulations of the Importment of Labor under 29 CFR Parts 3, 5 and 5a, governing the payment of wages and the ratio of apprentices and trainees to journeymen: Provided, that if wage rates higher than those required under such regulations are imposed by state or local law, nothing hereunder is intended to relieve the Contractor of its obligation, if any, to recuire payment of the higher rates.

The Contractor stipulates that he is at the time of this agreement not eligible under the provisions of any applicable regulations of the Department of Labor to receive an award of such contract.

REGULATIONS PURSUANT TO SO-CALLED "ANTI-KICKBACK ACT"

The Contractor shall comply with the applicable regulations set forth at 2) CFR Part ? of the Secretary of Labor, United States Department of Labor, made pursuant to the so-called Anti-Kickback Act of June 13, 1934 (15 USC 874) and any amendments or modifications thereof. The Contractor shall cause appropriate provisions to be inserted in subcontracts to maure compliance therewith by all subcontractors subject thereto, and the Contractor shall be responsible for the submission of affidavits required of Subcontractors thereunder, except as said Secretary of Labor may specifically provide for reusonable limitations. variations, tolerunces and exemptions from the requirements thereof. A copy of these regulations is included as a part of this contract.

ATTACHMENT TO FEDERAL LABOR STANDARDS PROVISIONS SO-CALLED "ANTI-KICKBACK ACT" AND REGULATIONS PROMULGATED PURSUANT THERETO BY THE SECRETARY OF LABOR, UNITED STATES DEPARTMENT OF LABOR

TITLE 18, U.S.C., section 874

(Replaces section 1 of the Act of June 13, 1934 (48 Stat. 948, 40 U.S.C., sec. 276b) pursuant to the Act of June 25, 1948, 62 Stat. 862)

KICKBACKS FROM PUBLIC WORKS EMPLOYEES

Whoever, by force, intimidation, or threat of procuring dismissal from employment, or by any other manner whatsoever induces any person employed in the construction, prosecution, completion or repair of any public building, public work, or building or work financed in whole or in part by loans or grants from the United States, to give up any part of the compensation to which he is entitled under his contract of employment, shall be fined not more than \$5,000 or imprisoned not more than five years, or both.

SECTION 2 OF THE ACT OF JUNE 13, 1934, AS

(48 Strt. 945, 62 Stat. 862, 63 Stat. 108, 72 Stat. 967, 40 U.S.C., sec.276c)

The Secretary of Labor shall make reasonable regulations for contractors and subcontractors engaged in the construction, prosecution, completion or repair of public buildings, public works or buildings or works financed in whole or in part by loans or grants from the United States, including a provision that each contractor and subcontractor shall furnish weekly a statement with respect to the wages paid each employee during the preceding week. Section 1001 of Title 18 (United States Code) shall apply to such statements.

Pursuant to the aforesaid Anti-Kickback Act, the Secretary of Labor, United States Department of Labor, has promulgated the regulations hereinafter set forth, which regulations are found in Title 29, Subtitle A, Code of Federal Regulations, Part 3. The term "this part," as used in the regulations hereinafter set forth, refers to Part 3 last above mentioned. Said regulations are as follows:

-XXX-

TITLE 2P - LABOR

Subtitle A — Office of the Secretary of Labor PART 3 — CONTRACTORS AND

SUBCONTRACTORS ON PUBLIC BUILDING OR PUBLIC WORK FINANCED IN WHOLE OR IN PART BY LOANS OR GRANTS FROM THE UNITED STATES

Section 3.1 Purpose and Scope.

This part prescribes "anti-kickback" regulations under section 2 of the Act of June 13, 1934, as amended (40 U.S.C., 276c), popularly known as the Copeland Act. This part applies to any contract which is subject to Federal wage stundards and which is for the construction, prosecution, completion, or repair of public buildings, public works or buildings or works financed in whole or in part by loans or grants from the United States. The part is intended to aid in the enforcement of the minimum wage provisions of the Davis-Bucon Act and the various statutes dealing with Federally assisted construction that contains aimilar minimum wage provisions, including those provisions which are not subject to Reorganization Plan No 14 te.g., the College Housing Act of 1950, the Federal Water Pollution Control Act, and the Housing Act of 1959), and in the enforcem int of the overtime provisions of the Contract Wor Hours Standards Act whenever they are appl; able to construction work. The part details the obligation of contractors and subcontractors relative to the weekly

submission of statements regarding the wages paid on work covered thereby; sets forth the circumstances and procedures governing the making of payroll deductions from the wages of those employed on such work; and delineates the methods of payment permissable on such work.

Section 3.2 Definitions.

As used in the regulations in this part:

(a) The terms "building" or "work" generally include construction activity as distinguished from manufacturing, furnishing of materials, or servicing and maintenance work. The terms include, without limitation, buildings structures, and improvements of all types, such as bridges, dams, plants, highways, parkways, streets, subways, tunnels, sewers, mains, powerlines, pumping stations, railways, airports, terminals, docks, piers, wharves, ways, lighthouses, bnovs, jetties, breakwaters, levees, and canals: dredging, shoring, scaffolding, drilling, blasting, escuvating, clearing, and landscaping. Unless conducted in connection with and at the site of such a building or work as is described in the foregoing sentence, the manufacture or furnishing of materials, articles, supplies, or equipment (whether or not a Federal or State agency acquires title to such materials, articles, supplies, or equipment during the course of the manufacture or furnishing, or owns materials from which they are manufactured or furnished) is not a "building" or "work" within the meanings of the regulations in this part.

- (b) The terms "construction," "prosecution," "completion," or "repair" mean all types of work done on a particular building or work at the site thereof, including, without limitation, aftering, remodeling, painting and decorating, the transporting of materials and supplies to or from the building or work by the employees of the construction contractor or construction autocontractor, and the manufacturing or furnishing of materials, articles, supplies, or equipment on the site of the building or work, by persons employed at the site by the contractor or subcontractor.
- (c) The terms "public building" or "public work" include building or work for whose construction, prosecution, completion, or repair, as defined above, a Federal agency is a contracting party, regardless of whether title thereof is in a Federal agency.
- (d) The term "building or work financed in whole or in part by loans or grants from the United States" includes building or work for whose construction, prosecution, completion, or repair, as defined above, payment or part payment is made directly or indirectly from funds provided by loans or grants by a Federal agency. The term does not include building or work for which Federal assistance is limited solely to loan guarantees or insurance.
- (e) Every person paid by a contractor or subcontractor in any manner for his labor in the construction, prosecution, completion, or repair of a public building or public work or building or work financed in whole or in part by loans or grants from the United States is "employed" and receiving "wages," regardless of any contractual relationship alleged to exist between him and the real employer.

(f) The term "any affiliated person" includes a

spouse, child, parent, or other close relative of contractor or subcontractor; a partner or officer of contractor or subcontractor, a corporation clos contractor with the contractor or subcontractor parent, subsidiary or otherwise, and an officer agent of such corporation.

(g) The term "federal agency" means the Unit States, the District of Columbia, and all execute departments, independent establishmen administrative agencies, and instrumentalities the United States and of the District of Columb including corporations, all or substantially all of t stock of which is beneficially owned by the Unit States by the District of Columbia, or any of t foregoing departments, establishments, agenciand instrumentalities.

Section 3.3 Werkly statement with respect to payment of wages.

- (a) As used in this section, the term "employe shall not apply to persons in classifications high than that of labore or mechanic and those who a the immediate supervisors of such employees.
- (b) Each contractor or subcontractor engaged the construction, prosecution, completion, or repe of any public building of public work, or building work financed in whole or in part by loans or gran from the United States, shall furnish each week statement with respect to the wages paid each of i employees engaged on work covered by 29 CFR Par 3 and 5 during the preceding weekly payroll perio This statement shall be executed by the contractor subcontractor or by an authorized officer or employe of the contractor or subcontractor who supervises th payment of wages, and shall be on form WH 34 "Statement of Compliance", or on an identical for on the back of WH 347, "Psyroll (For Contracto: Optional Usel" or on any form with identica wording. Sample copies of WH 347 and WH 348 me be obtained from the Government contracting of sponsoring agency, and copies of these forms may b purchased at the Government Printing Office.

(c) The requirements of this section shall no comply to any contract of \$2,000 or less.

(d) Upon a written finding by the head of the Federal agency, the Secretary of Labor may provid reasonable limitations, variations, tolerances, an exemptions from the requirements of this section subject to such conditions as the Secretary of Laborary specify.

(29 F.R. 93, Jan. 4, 1964, as amended at 33 F.I 10186, July 17, 1968)

Section 3.4 Submission of weekly statements and the preservation and inspection of weekly payro records.

(a) Each weekly statement required under Sec. 3. shall be delivered by the contractor or subcontractor within seven days after the regular payment date (the payroll period, to a representative of a Federal of State agency in charge at the site of the building of work, or, if there is no representative of a Federal of State agency at the site of the building of work, or, if there is no representative of a Federal of State agency at the site of the building of work, or, if there is no representative of a Federal of State agency at the site of the building of work after such examination and check as may be work after such examination and check as may be made, such statement, or a copy thereof, shall be kep available, or shall be transmitted together with

report of any violation, in accordance with applicable procedures prescribed by the United States Department of Labor

(b) Each contractor or subcontractor shall preserve his weekly payroll records for a period of three years from date of completion of the contract The payroll records shall set out accurately and completely the name and address of each laborer and mechanic, his correct classification, rate of pay, daily and weekly number of hours worked, deductions made, and actual wages paid. Such payroll records shall be made available at all times for inspection by the contracting officer or his authorized representative, and by authorized representatives of the Department of Labor

Section 3.5 Payroll deductions permissible without application to or approval of the Secretary of Labor.

Deductions made under the circumstances or in the situations described in the paragraphs of this section may be made without application to and approval of the Secretary of Labor

(a) Any deduction made in compliance with the requirements of Federal, State, or local law, such as ederal or State withholding income taxes and Federal social security taxes.

(b) Any deduction of sums previously paid to the employer as a bona tide prepayment of wages when such prepayment is made without discount or "bone fide prepayment of wages" interest. A considered to have been made only when cash or its equivalent has been advanced to the person employed in such manner as to give him complete freedom of disposition of the advanced funds.

(c) Any deduction of amounts required by court process to be paid to another, unless the deduction is in favor of the contractor, subcontractor or any affiliated person, or when cellusion or collaboration CXISES.

(d) Any deduction constituting a contribution on behalf of the persons employed to funds established by the employer or representatives of employees, or both, for the purpose of providing either from principal or income, or both, medical or hospital care. pensions or annuities on retirement, death benefits, compensation for injuries, illness, accidents, sickness, or disubility, or for insurance to provide any of the foregoing, or unemployment benefits, vacation pay, savings accounts, or similar payments for the benefit of employees, their families and dependents: Proceeded, however, That the following standards are met: (1) The deduction is not otherwise prohibited by Law; (2) it is either: (i) Voluntarily consented to by the employee in writing and in advance of the period in which the work is to be done and such consent is not a condition either for the obtaining of or for the continuation of employment, or till provided for in a bona fide collective bargaining agreement between the contractor or subcontractor and representatives of its employees, (3) no profit or other benefit is otherwise obtained, directly or indirectly, by the contractor or subcontractor or any affiliated person in the form of commission, dividend, or otherwise, and (4) the deductions shall serve the convenience and interest of the employee.

tel Any deduction contributing toward the purchase of United States Defense Stamps and Bonds when voluntarily authorized by the employee.

if) Any deduction requested by the employee to enable him to repay loans to or to purchase shares in credit unions organized and operated in accordance with Federal and State credit union statutes.

(g) Any deduction voluntarily authorized by the employee for the making of contributions to governmental or quasi governmental agencies, such as the American Red Cross

th) Any deduction columnarily authorized by the employee for the making of contributions to

Community Chests, United Givers Funds, and 3.6 are prohibited aimilar charitable organizations

(i) Any deductions to pay regular union initiation fees and membership dues, not including fines or special assessments Provuled, however. That a collective bargaining agreement between the contractor or subcontractor and representatives of its employees provides for such deductions and the deductions are not otherwise prohibited by law.

(j) Any deduction not more than for the "reasonable cost" of board, lodging, or other facilities meeting the requirement of section 3(m) of the Fair Labor Standards Act of 1938, as amended, and Part 531 of this title. When such a deduction is made the additional records required under Sec. 516.27 (a) of this title shall be kept

Section 3.6 Payroll deductions permissible with the approval of the Secretary of Labor.

Any contractor or subcontractor may apply to the Secretary of Labor for permission to make any deduction not permitted under Sec. 3.5. The Secretary may grant permission whenever he finds that:

(a) The contractor, subcontractor, or any affiliated person does not make a profit or benefit directly or indirectly from the deduction either in the form of a commission, dividend, or otherwise.

(b) The deduction is not otherwise prohibited by law

(c) The deduction is either the voluntarily consented to by the employee in writing and in advance of the period in which the work is to be done and such consent is not a condition either for the obtaining of employment or its continuance, or (2) provided for in a bone fide collective bargaining agreement between the contractor or subcontractor and representatives of its employees; and

(d) The deduction serves the convenience and interest of the employee

Section 3.7 Application for the approval of the Secretary of Labor

Any application for the making of payroll deductions under Sec 3.6 shall comply with the requirements prescribed in the following paragraphs of this section:

tal The application shall be in writing and shall be addressed to the Secretary of Labor.

th) The application anall identify the contract or contracts under which the work in question is to be performed. Permission will be given for deductions only on specific, identified contracts, except upon a showing of exceptional circumstances

ter The application shall state affirmatively that there is compliance with the standards set forth in the provisions of Sec. 3.6. The affirmation shall be accompanied by a full statement of the facts indicating such compliance

(d) The application shall include a description of the proposed deduction, the purpose to be served thereby, and the classes of laborers or mechanics from whose wages the proposed deduction would be

(e) The application shall state the name and business of any third person to whom any funds obtained from the proposed deductions are to be transmitted and the all it ation of such person, if any, with the applicant

Section 3.8 Action by the Secretary of Labor upon applications

The Secretary of Labor shall decide whether or not the requested deduction is permissible under provisions of Sec. 3 n. and shall notify the applicant in writing of his decision.

Section 3.9 Prohibited payroll deductions

Deductions not elsewhere provided for by this part and which are not found to be permissible under Sec.

Section 3.10 Methods of payment of wages.

The payment of wages shall be by cash, negotiable instruments payable on demand, or the additional forms of compensation for which deductions are permissible under this part. No other methods of payment shall be recognized on work subject to the Copeland Act.

Section 3.11 Regulations part of contract.

All contracts made with respect to the construction, prosecution, completion, or repair of any public building or public work or building or work financed in whole or in part by loans or grants from the United States covered by the regulations in this part shall expressly bind the contractor or autoentructor to comply with such of the regulations in this part as may be applicable. In this regard, see Sec 5.5(a) of this subtitle.

FEDERAL MINIMUM WAGE RATES FOR LABORERS AND MECHANICS

All laborers and mechanics employed upon the work covered by this contract shall be paid unconditionally and not less often than once each week, and without subsequent deduction or rebate on any account (except such payrol) deductions as are made mandatory by law and such other payroll deductions as are permitted by the applicable regulations issued by the Secretary of Labor, United States Department of Labor, pursuant to the Anti-Kickback Act hereinafter identifieds, the full amount due at time of payment computed at wage rates not less than those contained in the wage determination decision of said Secretary of Labor (a copy of which is attached and herein incorporated by reterence), regardless of any contractual relationship which may be alleged to exist between the Contractor or any subcontructor and such laborers and mechanics. All laborers and mechanics employed upon such work shall be paid in cash, except that payment may be by check if the employer provides or secures satisfactory facilities approved by the Owner for the Cashing of the same without cost or expense to the employee. For the purpose of this clause, contributions made or costs reasonably unticipated under Section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of Section 5.5(a)(1)(iv) of Title 29, Code of Federal Regulations. Also for the purpose of this clause, regular contributions made or costs incurred for more than a weekly period under plans, funds, or programs, but covering the particular weekly period. are deemed to be constructively made or incurred during such weekly period.

UNDERPAYMENTS OF WAGES OR SALARIES

In case of underpayment of wages by the Contractor or by any subcontractor to laborers or mechanics employed by the Contractor or subcontractor upon the work covered by this Contract, the Owner in addition to such other rights as may be afforded it under this Contract shall withhold from the Contractor, out of any payments due the Contractor, so much thereof as the Owner may consider necessary to pay such laborers or mechanics the full amount of wages required by this Contract. The amount so withheld may be dishursed by the Owner, for and on account of the Contractor or the subcentractor (as may be appropriate), to the respective laborers or mechanics to whom the same is due or on their behalt to plans, funds, or programs for any type of fringe benefit prescribed in the applicable wage determination.

ANTICIPATED COSTS OF FRINGE RENEFITS

If the Contractor does not make payments to a

trustee or other third person, he may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing fringe benefits under a plan or program of a type expressly listed in the wage determination decision of the Secretury of Labor which is a part of this Contract: Provided, however, the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program. A copy of any findings made by the Secretary of Labor in respect to tringe benefits being provided by the Contractor must be submitted to the Owner with the first payroll filed by the Contractor subsequent to receipt of the findings.

CONTRACT WORK HOURS AND SAFETY STANDARDS ACT PROVISIONS

The Contractor, if the contract is in excess of \$2,000, and any of his subcontractors, shall comply with Sections 103 and 107 of the Contract Work Hours and Safety Standards Act/40 USC 327-332 is supplemented by Department of Labor Regulations contained in 29 CFR Part 5.

A. Overtime Requirements

No Contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or inechanics, including watchmen and guards, shall require or permit any laborer or mechanic in any work week in which he is employed on such work to work in excess of 8 hours in any calendar day or in excess of 40 hours in such work week, unless such laborer or mechanic receives compensation at a rate not less than one and one-half times his basic rate of pay for all hours worked in excess of 8 hours in any calendar day or in excess of 40 hours in such work week, as the case may be.

B. Violation: Liability For Unpaid Wages Liquidated Damages

In the event of any colation of the clause set forth in paragraph A, the Contractor and any subcontractor responsible therefor shall be liable to any affected employee for his unpaid wages in addition, such Contractor and subcontractor shall be liable to the United States for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic employed in violations of the clause set forth in paragraph A, in the sum of \$10 for each calendar day on which such employee was required or permitted to work in excess of 80 hours or in excess of the standard work week of 40 hours without payment of the overtime wages required by the clause set forth in paragraph A.

C. Withholding For Liquidated Damages

The Owner shall withhold or cause to be withheld, from any moneys payable on account of work performed by the Contractor or subcontractors, such sums as may administratively be determined to be necessary to satisfy any liabilities of such Contractor or subcontractor for liquidated damages as provided in the clause set forth in paragraph B

D Subcontracts

The Contractor shall insert in any subcontract the clauses set forth in paragraphs A, B and C of this Section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts which they may enter into, together with a clause requiring this insertion in any further subcontracts that may in turn be made.

E. No laborer or mechanic shall be require I to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous to his

health and safety, as determined under construction, safety, and health standards promulgated by the Secretary of Labor. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market.

EMPLOYMENT OF APPRENTICES/TRAINEES

A. Apprentices

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (wher: appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen in any craft classification shall not be greater than the ratio permitted to the contractor as to his entire work force under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not a trained as defined in subdivision B of this subparagraph or is not registered or otherwise employed as stated above, shall be paul the wage rate determined by the Secretary of Labor for the classification of work he actually performed. The contractor or subcontractor will be required to furnish to the contracting officer or a representative of the Wage Hour Division of the U.S. Department of Labor written evidence of the registration of his program and apprentices as well as the appropriate ratios and wage rates texpressed in percentages of the journeyman hourly rates, for the area of construction prior to using any apprentices on the contract work. The wage rate paid apprentices shall be not less than the appropriate percentage of the journeyman's rate contained in the applicable wage determination.

B. Trainees

Except as provided in 29 CFR 5.15, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal contification, by the U.S. Department of Lawer, Manpower Administration, Bureau of Apprenticeship and Training. The ratio of trainces to journeymen shall not be greater than permitted under the plan approved by the Bureau of Apprenticeship and Training. Every trainer must be paid at not less than the rate specified in the approved program for his level of progress. Any employee listed on the payroll at a trainee rate who is not registered and participating in a traince plan approved by the Burea 1 of Apprenticeship and Training shall be paid not less than the wage rate determined by the Secretary of Labor for the classification of work he actually performed. The contractor or subcontractor will be required to furnish the contracting officer or a representative of the Wage-Horr Division of the U.S. Department of Labor written evidence of the certification of his program, the registration of the trainers, and the ratios and wage rates prescribed in that program In the event the Bureau of Anne sticeship and Training withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved

EMPLOYMENT OF CERTAIN PERSONS PROHIBITED

No person under the age of sixteen years and no person who, at the time, isserving sentence in a penal or correctional institution shall be employed on the work covered by this Contract.

EMPLOYMENT OF LABORERS OR MECHANICS NOT LISTED IN AFORESAID WAGE DETERMINATION DECISION

Any class of laborers or mechanics which is nor listed in the wage determination and which is to be employed under the Contract will be classified or reclassified conformably to the wage determination by the Owner, and a report of the action taken shall be submitted by the Owner.

to the Secretary of Labor. United States Department of Labor. In the event the interested parties cannot agree on the proper classification or reclassification of a particular class of laborers and mechanics to be used, the question accompanied by the recommendation of the Owner shall be referred.

to the Secretary of

Lubor for final determination.

FRINGE BENEFITS NOT EXPRESSED AS HOURLY WAGE RATES

The Owner shall require, whenever the minimum wage rate prescribed in the Contract for a class of biborers or mechanics includes a fringe benefit which is not expressed as an hourly wage rate and the Contractor is obligated to pay cash equivalent of such a fringe benefit, an hourly cash equivalent thereof to be established. In the event the interested parties cannot agree upon a cash equivalent of the fringe benefit, the question, accompanied by the recommendation of the Owner, shall be referred

to the Secretery of Labor for

determination.

FOSTING WAGE DETERMINATION DECISIONS AND AUTHORIZED WAGE DEDUCTIONS

The applicable wage poster of the Secretary of Labor, United States Department of Labor, and the applicable wage determination decisions of said Secretary of Labor with respect to the various classifications of laborers and mechanics employed and to be employed upon the work covered by this Contract, and a statement showing all deductions, if any, in accordance with the provisions of this Contract, to be made from wages actually earned by persons so employed or to be employed in such classifications, shall be posted at appropriate conspicuous joints at the site of the work.

COMPLAINTS, PROCEEDINGS, OR TESTIMONY BY EMPLOYEES

No laborer or mechanic to whom the wage, solary, or other labor standards provisions of this Contract are applicable shall be discharged or in any other manner discriminated against by the Contractor or any subcontractor because such employee has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable under this Contract to his employer.

CLAIMS AND DISPUTES PERTAINING TO WAGE RATES

Claims and disputes pertaining to wage rates or to classifications of laborers and mechanics employed upon the work towered by this Contract shall be promptly reported by the Contractor in writing to the Owner for referral by the latter

to the

Secretary of Labor, United States Department of Labor, whose decision shall be final with respect

QUESTIONS CONCERNING CERTAIN

FEDERAL STATUTES AND REGULATIONS

All questions arising under this Contract which relate to the application or interpretation of (a) the aforesaid Anti-Kickback Act, (b) the Contract Work Hours and Safety Standards Act, (c) the aforesaid Davis-Bacon Act, (d) the regulations issued by the Secretary of Labor, United States Department of Labor, pursuant to said Acts, or (e) the labor standards provisions of any other pertinent Federal statute, shall be referred,

Secretary of Labor, United States Department of Labor, for said Secretary's appropriate ruling or interpretation which shall be authoritative and may be relied upon for the purposes of this Contract.

PAYROLLS AND BASIC PAYROLL RECORDS OF CONTRACTOR AND SUBCONTRACTORS

The Contractor and each subcontractor shall prepare his payrolls on forms satisfactory to and in accordance with instructions to be furnished by the Owner. The Contractor shall submit weekly to the Owner two certified copies of all payrolls of the Contractor and of the subcontractors, it being understood that the Contractor shall be resugnable for the submission of copies of payrolls of all subcontractors. Each such payroll shall contain the "Weekly Stutement of Compliance" set forth in Section 3.3 of Title 29, Code of Federal Regulations. The payrolls and basic payroll records of the Contractor and each subcontractor covering all laborers and mechanics employed upon the work covered by this Contract shall be maintained during the course of the work and preserved for a period of 3 years thereafter. Such payrolls and basic payroll records shall contain the name and address of each such employee, his correct classification, rate of pay fincluding rates of contributions or costs anticipated of the types described in Section 1(b)(2) of the Davis Bucon Act, daily and weekly number of hours worked, deductions made, and actual wages paid. In addition, whenever the Secretary of Labor has found under Section 5.5(a)(I)(iv) of Title 29, Code of Federal Regulations, that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plun or program described in Section 1 (b)(2)(B) of the Davis-Bacon Act, the Contractor or subcontractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. The Contractor and each subcontractor shall make his employment records with respect to persons employed by him upon the work covered by the Contract available for inspection by authorized representatives of

the Owner, and the United States Department of Labor Such representatives shall be permitted to interview employees of the Contractor or of any subcontractor during working hours on the job.

SPECIFIC COVERAGE OF CERTAIN TYPES OF WORK BY EMPLOYEES

The transporting of materials and supplies to or from the site of the Project or Program to which this Contract pertains by the employees of the Contractor or of any subcontractor, and the manufacturity or furnishing of materials, articles, supplies, or equipment on the site of the Project or Program to which this Contract pertains by persons employed by

the Contractor or by any subcontractor, shall, for the purposes of this Contract, and without limiting the generality of the foregoing provisions of this Contract, be deemed to be work to which these Federal Labor Stundards Provisions are applicable. INELIGIBLE SUBCONTRACTORS

The Contractor shell not subcontract any part of the work covered by this Contract or permit subcontracted work to be further subcontracted without the Owner's prior written approval of the subcontractor. The Owner will not approve any subcontractor for work covered by this Contract who is at the time ineligible under the provisions of any applicable regulations issued by the Secretary of Labor, United States Department of Labor or

receive an award of such subcontract.

PROVISIONS TO BE INCLUDED IN CERTAIN SUBCONTRACTS

The Contractor shall include or cause to be included in each subcontract covering any of the work covered by this Contract, provisions which are consistent with these Federal Labor Standards Provisions and also a clause requiring the subcontractors to include such provisions in any lower tier subcontracts which they may enter into, together with a clause requiring such insertion in any further subcontracts that may in turn be made. BREACH OF FOREGOING FEDERAL LABOR

STANDARDS PROVISIONS

In addition to the causes for termination of this Contract as herein or elsewhere set forth, the Owner reserves the right to terminate this Contract if the Contractor or any subcontractor whose subcontract covers any of the work covered by this Contract shall breach any of these Federal Lahor Standards Provisions. A breach of these Federal Labor Standards Provisions may also be grounds for debarment as provided by the applicable regulations issued by the Secretary of Labor, United States Department of Labor.

LEAD-BASED PAINT HAZARD

The Contractor is hereby specifically made aware lead-based paint regulations, 24 CFR, Part 35, which are applicable to the construction or rehabilitation of residential structures. To the extent that the subject matter of this contract involves residential structures, the Contractor will comply with the lead-based paint regulations.

INTEREST OF MEMBERS, OFFICERS, OR EMPLOYEES OF PUBLIC BODY, MEMBER OF LOCAL GOVERNING BODY OR OTHER PUBLIC OFFICIALS

No member, officer, or employee of the Public Body, or its designees or agents, no member of the governing body of the locality in which the program is situated, and no other public official of such locality or localities who exercises any functions or responsibilities with respect to the program during his tenure or for one year thereafter, shall have any nterest, direct or indirect, in any contract or subcontract, or the proceeds thereof, for work to be performed in connection with the program assisted under the Agreement

PROHIBITION AGAINST PAYMENTS OF BONUS OR COMMISSION

The assistance provided under this Agreement shall not be used in the payment of any bonus or commission for the purpose of obtaining approval of the application for such assistance, or any other approval or concurrence of · required. under this Agreement.

Provided however

that reasonable fees or bona fide technical consultant

· managerial or other such services, other than actual solicitation, are not hereby prohibited if otherwise eligible as program costs.

Standard Federal Equal Employment Opportunity Construction Contract Specifications (Executive Order 11248)

In addition to the clause described above, all Federal contracting officers, all applicants and all nonconstruction contractors, as applicable, shall include the specifications set forth in this section, as Attachment to the General Terms and Conditions, in all Federal and federally assisted construction contracts in excess of \$10,000 to be performed in geographical areas designated by the Director pursuant to 60-4.6 of the Affirmative Action Requirements - Construction Contractors - and in construction subcontracts in excess of \$10,000 necessary in whole or in part to the performance of nonconstruction Federal contracts and subcontracts covered under the Executive Order.

Notice of Requirement for Affirmative Action to **Ensure Equal Employment Opportunities**

The notice contained in the advertisement for bid. and ascontained herein as attachment to the General Terms and Conditions, sets forth goals and timetables for minority and female participation, as well as contractor and subcontractor responsibilities.

PENNSYLVANIA STEEL PRODUCTS PROCUREMENT ACT (No. 1978-3)

If any steel products are to be used or supplied in the performance of the contract, only steel products produced in the United States shall be used or supplied in the performance of the contract or any subcontracts thereunder. This provision shall not apply in any case where the head of the public agency, in writing, determines that the type of steel products necessary to the performance of the contract are not produced in the United States in sufficient quantities to meet the requirements of the contract.

ARCHITECTURAL BARRIERS ACT OF 1968

The contractor is hereby made aware that any building or facility tother than a privately owned residential structure) designed, constructed, or altered with funds made available under this part, shall comply with the requirements of the "American Standard Specifications for Make Buildings and Facilities Accessible to, and Usuable by the Physically Handscapped," Number A-117.1 - R 1971. subject to the exceptions contained in 41 CFR Subport 101-19-604 issued pursuant to the Architectural Barriers Act of 1988, 42 U.S.C. 4151.

NATIONAL FLOOD INSURANCE PROGRAM

The contractor is hereby made aware that projects assisted through the Grant Program shall comply with the Federal

Disaster Protection Act of 1973. Under that Act, no Federal Agency or office shall approve any financial assistance for acquistion or construction purposes as defined under section 3(a) of the said act, on and after July 1, 1975, for one year after a community has been formally nutified of its identification as a community contained in an area of special flood hazard, whichever is later) for use in any area that has been identified by

as an area having special flood hazards unless the community in which such an area is situated is then participating in the National Flood Insurance Program.

RETENTION OF RECORDS

Financial records, supporting documents, statistical records, the environmental review records required by 24 CFR 58.11, and all other records pertinent to the grunt program shall be retained by the recipient for a period of three years from the date of the submission of the annual performance report.

GENERAL SPECIFICATIONS

SPECIAL CONDITIONS

401. TIME FOR COMPLETION

The work which the Contractor is required to perform under this Contract shall be commenced at the time stipulated by the local Public Agency in the Notice to Proceed to the Contractor and shall be fully completed on or before

402. LIQUIDATED DAMAGES

As actual damages for any delay in completion of the work which the Contractor is required to perform under this Contract are impossible of determination, the Contractor and his Sureties shall be liable for and shall pay to the Local Public Agency the sum of $\underline{\text{Fifty Dollars ($50.00)}}$ as fixed, agreed and liquidated damages for each calendar day of delay from the above stipulated for completion, or as notified in accordance with Section 109 hereof, until such work is satisfactorily completed and accepted.

403. RESPONSIBILITIES OF CONTRACTOR

Except as otherwise specifically stated in the Contract Documents and Technical Specifications, the Contractor shall provide and pay for all materials, labor, tools, equipment, water, light, heat, power, transportation, superintendence, temporary construction of every nature, charges, levies, fees, or other expenses and all other services and facilities of every nature whatsoever necessary for the performance of the Contract and to deliver all Improvements embraced in this Contract complete in every respect within the specified time.

404. COMMUNICATIONS

- a. All notices, demands, requests, instructions, approvals, proposals, and claims must be in writing.
- b. Any notice to or demand upon the Contractor shall be sufficiently given if delivered at the office of the Contractor stated on the Signature page of the Agreement (or at such other office as the Contractor may from time to time designate in writing to the Local Public Agency), or if deposited in the United States mail in a sealed, postage-prepaid envelope, or delivered with charges prepaid to any telegraph company for transmission, in each case addressed to such office.

- c. All papers required to be delivered to the Local Public Agency shall, unless otherwise specified in writing to the Contractor, be delivered to the Department of Parks and Public Property, Municipal Building, Fifth and Welsh Streets. Chester, Pa. 19013, and any notice to or demand upon the Local Public Agency shall be sufficiently given if so delivered, or if deposited in the United States mail in a sealed, postage-prepaid envelope, or delivered with charges prepaid to any telegraph company for transmission to said Local Public Agency at such address, or to such other address as the Local Public Agency may subsequently specify in writing to the Contractor for such purpose.
- d. Any such notice shall be deemed to have been given as of the time of actual delivery or, in the case of mailing when the same should have been received in due course of post, or in the case of telegrams, at the time of actual receipt, as the case may be.

405. JOB OFFICES

- a. The Contractors and their subcontractors shall maintain such office and storage facilities on the Site as are necessary for the proper conduct of the work. The Contractors shall mutually agree on the location of such office and storage facilities, which shall be within the property lines and which may not be within the branch spread of any existing tree to remain. The General Construction Contractor shall provide a telephone at the job office.
- b. All parking of equipment and storage of materials shall occur within the property lines.
- c. Upon completion of the Improvements, or as directed by the Local Public Agency, the Contractor shall remove all such temporary structures and facilities from the Site, same to become his property, and leave the Site of the work in the condition required by the Contract or the condition existing prior to commencing work.

406. PARTIAL USE OF SITE IMPROVEMENTS

The Local Public Agency, at its election, may give notice to the Contractor and place in use those sections of the Improvements which have been completed, inspected, and can be accepted as complying with the Technical Specifications and if in its opinion, each such section is reasonably safe, fit and convenient, for the use and accommodation for which it was intended, provided;

- a. The use of such sections of the Improvements shall in no way impede the completion of the remainder of the work by the Contractor.
- b. The Contractor shall not be responsible for any damage or maintenance costs due directly to the use of such sections.
- c. The use of such sections shall in no way relieve the Contractor of his liability due to having used defective materials or to poor workmanship.

407. CONTRACT DOCUMENTS AND DRAWINGS

The Local Public Agency will furnish the Contractor without charge, eight (8) copies of the Contract Documents, including Technical Specifications and Drawings. Additional copies requested by the Contractor will be furnished at cost.

408. REFERENCES

- a. Where the term "Owner" or "Agency" appears, it refers to the Department of Parks and Public Property, of The City of Chester, Pennsylvania.
- b. Where the term "Landscape Architect", "Architect" or "Engineer" appears, it refers to

409. SPECIFICATIONS EXPLANATION

- a. Every effort has been exerted to make the specifications as clear and concise as possible. Omission of words or phrases such as, "The Contractor shall", "furnish and install complete in every respect", "in conformity therewith", "shall be", "as noted on the drawings", "according to the plans", "a", "an", "the", and "all", is intentional. Omitted words or phrases shall be supplied by inference in the same manner as they are when a "note" occurs on the drawings.
- b. The Contractor shall provide all items, articles, products, materials, operations, or methods listed, mentioned or scheduled on the drawings, or specified herein, or both, including all labor, materials, equipment, and incidentals necessary and required for their completion.
- c. The specifying of a basic material, part or piece of equipment shall include all parts, accessories, devices, etc., necessary for proper and complete installation and operation, and as its manufacturer may recommend or specify for such items and their installation whether or not specifically mentioned. The specifying of an item as a singular number shall apply to as many items as required to complete the work. System components shall be compatible.
- d. Wherever the words, "approved", "satisfactory", "directed", "submitted", "inspected", or similar words or phrases are used, it shall be assumed that the phrase, "the Landscape Architect or his representative", follows the verb as the object of the clause, such as, "approved by the Landscape Architect or his representative".
- e. All references to standard specifications or manufacturer's installation directions shall mean the latest edition thereof.

410. DRAWINGS

In general, the drawings are made at small scale and are diagrammatic, and do not necessarily show all devices, bends, rises, drops, offsets, boxes, fittings, specialties, attachments, supports, and other required appurtenances; the Contractor shall provide all such items necessary for completion of the work. Drawings shall not be scaled for locations, but each item shall be located in proper relationship of adjacent work, and as directed by the Landscape Architect.

411. STANDARD OF QUALITY

- a. Where a particular product is specified by name or names, without the phrase "or approved equal" or phrase of similar meaning, the naming of such product shall be interpreted as establishing the standard of quality and character of design and shall not be construed as limiting competition.
- b. Such product or products so specified denote the standard of quality, performance, capacity, and physical dimensions and other characteristics required. After award of Contract, the Contractor may make written request to the Landscape Architect for use of products which are fully equal to those so specified. When required by the Landscape Architect, the Contractor shall submit satisfactory proof that the substitute product offered is fully equal to that so specified, in all respects. Landscape Architect's decision concerning equality shall be final.

412. SHOP DRAWINGS

Shop drawings shall be submitted for items as required in the Technical Specifications. Five copies are required for each submission, three of which will be returned to the Contractor for each approved submission.

413. SAMPLES

Submit samples as specified or required. Execute work in accordance with approved samples.

414. PROJECT FILE

Each Contractor shall keep on the work, one copy of all drawings, specifications, shop drawings, all addenda, approved change orders, all correspondence relating to the conduct of the work, and all codes and regulations governing his work.

415. MATERIALS AND EMPLOYEES

- a. All materials and equipment incorporated in this work shall be new, first grade, and the best of their respective kinds, unless otherwise specified.
- b. In all respects, workmanship shall be first-class and of the very highest quality. This applies to both shop and field workmanship. Only skilled mechanics in the respective trades shall be employed; those considered incompetent by the Landscape Architect or the Contractor shall be immediately replaced. Mechanics shall perform only that portion of the work in which they are skilled, and all work shall be executed harmoniously. Rejected work shall be immediately replaced. At completion of project, all work shall be in first-class condition.

416. SURVEYS, PERMITS AND REGULATIONS

- a. Verify grades, lines, levels, locations, dimensions as indicated. Report any errors or inconsistencies before commencing work.
- b. If the Contractor observes that drawings and specifications are at variance with any laws or ordinances, rules, or regulations, he shall promptly notify the Landscape Architect in writing. If the Contractor performs any work knowing it to be contrary to such notice to the Landscape Architect, he shall bear all costs arising therefrom.
- c. The Contractor shall obtain all permits required and is responsible for performing, or having performed, all layout work.

417. EXISTING CONDITIONS

- a. Each bidder and contractor shall obtain full knowledge, by personal and careful examination, of all existing structures and conditions at the site, of all requirements of the specifications and drawings, of all the work of other contractors that may affect his work. Each contractor hereby accepts all such conditions and requirements and hereby assumes all responsibilities and costs resulting from his failure to obtain full knowledge of any of them.
- b. Each bidder and contractor shall accept the premises and structures as he finds them, and shall assume all responsibilities and costs ensuing from all conditions existing at the time of advertising for bids and for all those existing thereafter.
- c. Information regarding existing conditions at the site indicated on drawings or given in specifications is given only for the convenience of bidders and contractors, and they shall assume all responsibilities and costs due to any variances between the information given and the actual existing conditions.

418. CLEANING UP

- a. Each Contractor shall at all times keep the premises free from accumulations of waste material or rubbish caused by his employees or work, and at the completion of the work, he shall remove all his rubbish from and about the site and all his tools, scaffolding and surplus materials and shall leave his work "broom clean".
- b. Mud, dust or debris resulting from the work of this Contract shall not be allowed to accumulate on adjacent streets and sidewalks.

419. BURNING

No burning will be permitted on the site.

420. DAMAGE TO WORK BY FIRE AND THEFT

If any work or material is damaged by fire or vandalism or any installed materials are lost through theft prior to acceptance of the work by the Agency. Contractor whose work or materials were so damaged or lost shall replace and make good any such damage or loss entirely at his own expense.

421. CUTTING AND PATCHING

- a. Cutting and patching shall be done only by skilled mechanics of the respective trade or trades whose materials are involved in the cutting and patching. All such work is subject to the Landscape Architect's approval.
- b. Where openings are cut into existing work, or existing work is extended or disburbed in any way, patch as required with materials, finishes, color, texture, etc., to exactly match existing adjacent work, and in such a manner as to make patching indistinguishable from existing work. Where in first-class condition, as determined by the Landscape Architect, existing materials indicated to be removed may be used to patch existing like work, unless otherwise indicated.

422. REFERENCED SPECIFICATIONS

a. Where the term "referenced specifications" is used in this specification it shall mean Commonwealth of Pennsylvania, Department of Transportation Specifications, Form 408, latest edition with all supplements.

423. LOCATION OF PROJECT

a. The work will be constructed in the Commodore Barry Bridge Recreation Area in the City of Chester, Pennsylvania, in a location as indicated on the drawings.

424. STIPULATION

All requirements of Part A (Instructions and Forms) and Part B (General Specifications) are hereby made a part of each Contract and all work included in Part C (Technical Specifications) and all work indicated on the Drawings.

425. PROTECTION OF EXISTING PLANT MATERIAL

a. The Contractor shall replace, in like, size and quality, or, at the option of the Local Public Agency, make restitution to the Local Public Agency for any existing plant material to remain which is damaged or destroyed by any act due to or incidental to the work of this Contract. Restitution shall be in accordance with the following schedule:

| | Shrubs or trees under 2" caliper | \$ 50 each |
|----|----------------------------------|--------------|
| 2) | Trees 2" to 4" caliper | \$ 300 each |
| 3) | Trees 4" to 8" caliper | \$ 800 each |
| 4) | Trees 8" to 12" caliper | \$1,200 each |
| 5) | Trees over 12" caliper | \$2,500 each |

Measurements shall be as specified by "American Standard for Nursery Stock", American Association of Nurserymen.

- b. The above schedule shall apply to any existing plant material to remain which is destroyed or damaged, whether or not it is noted to be protected, unless removal of material is approved in writing by <u>Landscape Architect</u>. Any damage to any tree or shrub is to be considered a total loss and full restitution or replacement shall be made.
- c. The Contractor shall not store or locate equipment, trailers or supplies beneath the branch spread of trees to remain. No fence, sign, guy wire or service line shall be attached to any tree to remain.

426. EARTHWORK

a. The Contractor shall be solely responsible for determining the amount of earth required to complete the work to the finished grades shown and shall include in his bid price the cost of providing off site borrow as may be necessary to supplement the amount of earth available from cut as shown by the project grading.

427. TOPSOIL

a. The Contractor shall be solely responsible for determining the amount of topsoil required to complete the work to the finished grades shown and shall include in his bid price the cost of providing offsite topsoil as may be necessary.

428. NOTICE TO AUTHORITIES

a. As part of the work of this Contract will require closing or partial closing of certain streets, the Contractor shall be responsible for giving sufficient notice to pertinent City of Chester authorities prior to beginning such work. The Contractor shall also adhere to all requirements of such authorities regarding closing or partial closing of streets at no additional cost to the Local Public Agency.

429. O.S.H.A. REQUIREMENTS

a. The Contractor shall contact the Occupational Safety and Health Administrational Regional Office in Philadelphia and obtain the booklet entitled "Record-keeping Requirements Under the Williams-Steiger Occupational Safety and Health Act of 1970". The Contractor shall be required to adhere to all provisions contained therein. The regional office address is:

Penn Square Building, Room 410 Juniper and Filbert Streets Philadelphia, PA 19107 Telephone: 215-597-4102

430. EROSION AND SEDIMENTATION CONTROL

a. The Contractor shall be responsible for coordination with the Delaware County Conservation District to ensure that his operations comply

with all Commonwealth of Pennsylvania and Local regulations regarding erosion and sedimentation control. The Contractor shall modify his operations and/or take whatever steps are necessary, at no additional cost to the Local Public Agency, to ensure such compliance.

431. NOTIFICATIONS AND PRECAUTIONS

- a. The Contractor shall comply fully with Section 5 of the General Assembly Act No. 287 of the Commonwealth of Pennsylvania. In partial compliance thereof, he shall notify, not less than three (3) working days prior to commencing excavation, the Chester Water Authority, Fifth and Welsh Streets, Chester, Pennsylvania (Phone TR 6-8181) and the Philadelphia Gas and Electric Company, Customer Service Dept., 18 East 5th Street, Chester, Pennsylvania (Phone 494-1200) to arrange cooperative steps to be taken to avoid possible damage to underground utilities.
- b. The Contractor shall use every precaution to prevent damage to streets, curbs, walks, utilities, poles, fences, above or below-ground structures, and plantings that are adjacent to or included in the areas under contract, and shall repair or replace at his own expense any work to remain which is damaged or destroyed by his forces.

432. PROJECT SIGNS

- a. Permanent Sign. The General Contractor shall erect at location shown on Drawings a 4'x8' sign as detailed on Drawing No. . . Lettering and wording as determined by the City of Chester. Sign shall be constructed of nominal 2" thick planks of southern yellow pine, Grade #2 or better, pressure treated with pentachloraphenol at 10.5 lbs. per cubic foot, minimum.
- b. <u>Temporary Sign</u>. The General Contractor, at his own cost and expense, shall erect at a prominent location as selected, a 6'x8' sign, well braced and supported by 4"x4" post, identifying the project under construction. Sign board may be constructed from weatherproof plywood, hardboard or other smooth face material that will weather and remain intact throughout the job. A 3" wood border shall frame the sign. The sign shall be erected with the 8' dimension horizontal. The base color of the sign shall be white and weatherproof flat paint with red border. Lettering shall be in fast blue block letters and shall conform to the following:

| CITY OF CHESTER | | (4" | letters | min.) |
|--------------------------------|----------|-----|---------|-------|
| DEPARTMENT OF PARKS AND PUBLIC | PROPERTY | (4" | letters | min.) |
| JOSEPH F. BATTLE | | | letters | |
| MICHAEL D. MACNEILLY | DIRECTOR | (3" | letters | min.) |
| COMMODORE BARRY BRIDGE | , | | | |
| RECREATION AREA PHASES I & II | | (4" | letters | min.) |

GENERAL SPECIFICATIONS

SCHEDULE OF DRAWINGS

All drawings in the following schedule form a part of the Contract.

| DRAWING NO. | TITLE |
|-------------|--|
| 1 | Site Plan |
| 2 | Erosion and Sedimentation Control Plan |
| 3 | Layout and Construction Control Plan |
| 4 | Grade Plan |
| 5 | Delaware Avenue Sections and Details |
| 6 | Cross Sections |
| 7 | Cross Sections |
| 8 | Cross Sections |
| 9 | Electrical Plan and Details |
| 10 | Ramp and Pier Plan and Sections |
| 11 | Sections and Details |
| 12 | Sections and Details |
| 13 | Sections and Details |
| 14 | Sections and Details |

DIVISION 1 - GENERAL

Section 1A - Erosion and Sedimentation Control Plan

1A-1 PROTECTION OF THE ENVIRONMENT

- 1.1 The Contractor shall provide for the prevention, control and abatement of land, water and air pollution during construction in accordance with P.L. No. 247, Act. No. 247, dated October 26, 1972, which shall include but is not limited to:
 - (a) Remove all refuse from site of work for disposal in accordance with rules and regulations of the authority having jurisdiction over the disposal area.
 - (b) Provide for filtration of all contaminated water discharging directly into a stream.

1A-2 TEMPORARY CONTROL MEASURES

- 2.1 No water which transports sediment resulting from earth moving, demolition or other construction activities shall be permitted to discharge into the waters of the Commonwealth or beyond the contract limits of the project.
- 2.2 Natural surface water shall be diverted away from the work area. Diversion terraces and channels shall be constructed up-grade of work as required to convey tributary runoff around and beyond the outer limits of the area subject to earth moving, demolition, or other construction activities. Interception channels shall be constructed within the project area as required to control the discharge of sediment due to construction activities.
- 2.3 All surface runoff from a project area and all discharge resulting from the dewatering of excavations shall be collected and diverted to facilities for removal of sediment. Water collected by interceptor channels shall be conveyed to sedimentation basins or to vegetated areas but not directly to streams or storm drains.
- 2.4 Earthmoving activities shall be planned to minimize the areal extent and the duration of exposure of disturbed land.
- 2.5 Surfaces of cut and embankment slopes, ditches, swales, earth stockpiles, and areas denuded of topsoil shall be stabilized to minimize surface erosion as soon as possible after exposure. Whether temporary or permanent, such surfaces shall not be left unstabilized for more than twenty (20) days after exposure.
- 2.6 Stabilization shall generally be accomplished by vegetative measures, seeding with rapidly growing plants, such as annual rye grass, small grain, sudan grass, or field bromegrass. This planting should be supplemented by mulches and protective netting as required or directed.

2.7 Erosion control facilities shall be maintained for the duration of construction and shall be removed only after the permanent drainage and erosion control features of the project have been completed and established in operation.

1A-3 PERMANENT CONTROL MEASURES

- 3.1 The permanent control measures and facilities consist of seeded drainage ditches, mulching and seeding, restoring permanent cover to disturbed areas and a storm system.
- 3.2 The design considerations and calculations are based on the overall design of the project and take into account suggestions and criteria given in the Soil Erosion and Sedimentation Control Manual.

- END OF SECTION -

DIVISION 2 - SITE WORK

Section 2A - Site Preparation and Demolition

2A-1 WORK INCLUDED

- 1.1 The work covered by this section consists of furnishing all labor, equipment, supervision and appurtenances necessary to complete all site preparation and demolition required for the project in strict accordance with this section of the specifications and the drawings, including but not limited to:
 - (a) Necessary protection for trees that are to remain
 - (b) Clearing and grubbing
 - (c) Diversion and control of surface and ground water
 - (d) Demolition of existing construction in way of new work
 - (e) Removal of old foundations, debris and old dump areas throughout the site

2A-2 RELATED SECTIONS

- 2.1 Other divisions and sections of these specifications which are related to this section are:
 - (a) General Conditions, DGS Dated 1975
 - (b) Division 1 General
 - (c) Section 2B Earthwork

2A-3 PRECAUTIONS

- 3.1 Work shall be performed in a manner to prevent damage or injury to property or the public. The Contractor shall provide barriers, warning lights and other protection as required and protect as necessary any existing monuments, bench marks or utilities that are to remain in service and restore any damage to original conditions or repair as directed, at no additional cost.
- 3.2 Before starting work, the Contractor shall protect any trees or shrubs shown or designated to be saved by boxing or wire fencing staked securely in place or other approved means, maintained until completion of work, or until removal of protection may be directed by the Engineer/Inspector.
- 3.3 The Erosion and Sediment Control Plan and drawing is a requirement of the Department of Environmental Resources and must be adhered to.

2A-4 DEMOLITION OF EXISTING STRUCTURES

4.1 Existing structures indicated on the plans or directed by the Engineer/ Inspector shall be removed or demolished in a neat and orderly manner. Concrete walls and slabs shall be broken up and removed at least 1-1/2 feet below construction or finish grade, whichever may govern. Slabs encountered at any elevations shall be broken up to allow drainage. Sound concrete and masonry rubble may be utilized as fill in approved areas. Other materials, rubbish and debris resulting from demolition shall be removed from Commission lands as work progresses and dumped in a D.E.R. approved area chosen by the Contractor. A disposal area will not be available on Commission lands.

- END OF SECTION -

Section 2B - Earthwork, Crushed Aggregate and Stone

2B-1 WORK INCLUDED

1.1 The work covered by this section consists of all earthwork, including topsoil stripping, excavation, backfill, rough grading, embankment, and related and incidental operations required to complete the project as indicated on the plans and specified herein, including all excavations for roadways, parking areas, boat ramps, and wharfs.

2B-2 UNCLASSIFIED EXCAVATION

2.1 E cavation under this contract is unclassified and includes (without limitation thereto) the excavation and removal of all soil, shale, rock, existing foundations, fill, and every kind of subsurface condition encountered in the contract area. No extra or additional compensation for excavation will be paid under this contract except in such case where the excavation is below the grades indicated on the drawings. Before starting excavation, Contractor shall remove topsoil to a 6 inch depth and stockpile at suitable locations as approved by the Engineer/Inspector. Topsoil shall be stored to use in topsoiling and finish grading.

2B-3 CLEARING AND GRUBBING

- 3.1 Contractor shall clear the site of all obstructions to the work, break up and remove existing paving where required, remove trees and shrubs not designated to be saved and stumps and roots to a depth of at least one foot below grade and other vegetation to a depth of at least 6 inches and clear off all stones, debris and rubbish. Grubbing shall consist of the below ground removal and disposal of all natural growth, logs, timber and other objects deemed detrimental in the foundation of embankment fills or structures. Roots having a diameter of 1-1/2 inches or more shall be removed to a depth of 3 feet below original ground elevation under the area of any structures. All material so removed shall be burned or otherwise disposed of in compliance with statutes, rules and regulations of Federal, State and local governments.
- 3.2 Contractor shall leave site properly cleared and clean, ready for start of earthwork.

2B-4 BLASTING

4.1 No blasting may be done without prior approval of the Bureau. If explosives are permitted, all requirements of local, State or other laws and regulations relating to this type of work must be fully complied with and all permits required must be obtained and paid for by the Contractor prior to the commencement of any blasting. All blasting shall be performed by qualified powder men.

2B-5 DISPOSITION OF UTILITIES

5.1 The Contractor shall check the location of existing utilities required to remain in place, either overhead or underground, and take all necessary precautions to prevent injury or damage during the performance of the contract and shall be responsible for any and all damages thereto.

5.2 Where significant earth is removed or fill placed around a living tree, a stone wall shall be placed around the tree at least 30" from the trunk or a distance which will prevent damaging exposure to roots or suffocation of bark in accordance with the drawings or as directed by the Engineer/Inspector. Construction equipment shall not be operated over tree roots except where necessary.

2B-6 DISPOSAL OF MATERIALS

6.1 All spoils become the property of the Contractor and shall be disposed of to the satisfaction of the Engineer/Inspector and in compliance with all current, local or state ordinances and regulations relating to disposal of material. Spoil area is available on the site.

2B-7 GROUND WATER

7.1 Certain sections of the construction site may contain excessive ground water and it shall be the responsibility of the Contractor to provide the necessary equipment, materials and labor to eliminate any detrimental effects or hindrances to the construction and/or the construction operations resulting from ground water at no additional cost to the Bureau. The Contractor shall be prepared to encounter ground water at any location within the site. Materials containing excess water will not be considered unsuitable on that basis alone and all dewatering shall be the responsibility of the Contractor and shall be done whenever and wherever necessary at his sole cost and expense.

2B-8 EXCAVATING

- 8.1 The Contractor shall perform all excavation to the dimensions and elevations indicated on the drawings for structures and for all work incidental thereto. Excavation shall extend a minimum from the lines of structures to the face or bank of shoring, to allow working space for masons, for forms, or for installation of services and for inspections, except where concrete is authorized to be deposited directly against excavated surfaces. All loose material shall be removed from excavations and bottoms carefully leveled to grade. For other work, the Contractor shall determine the widths to be excavated in accordance with the drawings and cross-sections furnished by the Bureau. Excess excavation beyond the established cut lines shall be the responsibility of the Contractor and no compensation will be allowed, unless otherwise authorized in writing by the Bureau.
- 8.2 Excavated material to be reused for backfill or other purposes shall be piled away from the edge of the excavated area, a sufficient distance to prevent overloading the bank and graded in such a way as to prevent surface water from entering the excavated area. Excess material from excavation not suitable nor required for backfill or other purposes shall be hauled from the area as excavated, as directed by the Engineer/Inspector.
- 8.3 Contractor shall not excavate to full depth when rain or freezing conditions are imminent. Completed foundation soil surfaces shall be protected from frost. Where foundation soil surfaces are damaged by water, mud or otherwise disturbed, all loose mud or other materials shall be removed and the surface regraded.

- 8.4 Where the concrete foundation excavation has been carried below plan grade due to errors in excavation, or to freezing, or to the removal of mud or other loose materials, or a rock surface has been overshot or pitted, the foundation soil shall be restored to plan grade with the same concrete as that specified for the footing above it at no additional cost to the Bureau.
- 8.5 Contractor shall furnish adequate advance notification to the Engineer/ Inspector of the times when footing excavations are to be completed so that the bearing quality of bottoms may be inspected and/or tested before forms are constructed or concrete poured.
- 8.6 Should the bearing at the levels indicated be found by the Engineer/
 Inspector to be inadequate, he may order the excavation carried down to sound bearing.
 Should suitable bearing be found at a lesser depth than indicated, the Engineer/Inspector may order the reduction of excavation specified or shown on the drawings.
- 8.7 Where soil conditions will permit, footing trenches may be excavated to the exact dimensions of the concrete and side forms omitted. Concrete shall be placed upon undisturbed and firm bottoms and under any excess cut of concrete footings and foundations. Excess cut under slabs shall be filled with gravel and be thoroughly compacted.
- 8.8 Where concrete footings or walls rest on rock, the rock shall be leveled off to a clean, even, hard surface. Sloping rock shall be leveled off in steps.

2B-9 SHORING AND PROTECTION

- 9.1 Contractor shall provide and maintain sheathing, shoring and bracing as necessary to prevent cave-ins in all types of excavations.
- 9.2 Contractor shall erect and maintain guard rails, fences, warning lights, and other protection required for safety of all persons at excavations.
- 9.3 Contractor shall remove temporary sheathing, shoring, bracing, and protection when no longer required by adjacent conditions and when foundation construction is complete.

2B-10 EMBANKMENT

- 10.1 All embankment material shall, unless otherwise directed by the Engineer/Inspector, be placed in uniform horizontal layers of not more than a loose 8-inch depth for the full width of the cross section. The final grade shall be within plus or minus 0.2 of a foot of the lines and grades shown on the drawings or otherwise established by the Engineer/Inspector. Material for the earthen coffer dam placed in wet areas which cannot be pumped dry may be end-dumped in water or to the elevation necessary to establish a satisfactory working platform.
- 10.2 Each layer for its full width shall be compacted to not less than 97 percent of the determined dry weight density, except that the material in the top 3 feet of all embankments shall be compacted to not less than 100 percent of the determined dry weight density.

- 10.3 Material for embankment construction shall consist of all excavated material on the project except such material as may be determined to be unsuitable by the Engineer/Inspector or approved borrow material and shall conform to the following requirements.
 - (a) Soil shall include all earth materials having a maximum size that can be readily placed and compacted in loose 8 inch layers and of which more than 35 percent shall pass the No. 200 sieve. Soil shall have a minimum dry weight density of 95 pounds per cubic foot as determined in accordance with PTM No. 106, Method B and a maximum liquid limit of 65 as determined in accordance with ASSHTO Designation T 89. The plasticity index, as determined by ASSHTO Designation T 90 for soils having liquid limits of 41 to 65 inclusive, shall be not less than that determined by the formula--Liquid Limit minus 30.
 - (b) Granular material shall include all natural or synthetic mineral aggregates having a maximum size that can be readily placed and compacted in loose 8 inch layers of which 35 percent or less shall pass the No. 200 sieve.
 - (c) Shale shall include all rock-like materials formed by the natural consolidation of mud, clay, silt, and fine sand, and usually thinly laminated, comparatively soft and easily split, having a maximum size that can be readily placed and compacted in loose 8 inch layers.
 - (d) Rock shall include all igneous, metamorphic and sedimentary rock which cannot be excavated without blasting or the use of rippers and all boulders and detached stones having a maximum size that cannot be readily placed and compacted in loose 8 inch layers and which generally have insufficient fines to normally fill all voids in each layer.

2B-11 BACKFILLING

- 11.1 No backfilling shall be done around any parts of the structures until such parts have been inspected and the backfilling authorized by the Engineer/Inspector. No backfilling inside the building or backfilling against foundation walls, or area ways shall be done until concrete forms have been removed and pointing and dampproofing of concrete and masonry work has been completed and the concrete is thoroughly cured. Filling and backfilling inside of the building and to a minimum point 5 feet outside of exterior building lines (depending on elevation of subgrade to footing level) or within a dimension encompassed by a 45 degree line drawn from footing level to working surface, shall be installed in 8 inch layers, dampened, and compacted to optimum moisture content to a dry density of not less than 95 percent of the maximum dry density as determined by ASTM D1557, Method C. Fill more than 5 feet outside of the building lines shall be installed in 12 inch layers uniformly spread, tamped and rolled, and then leveled or sloped as required. All backfill shall be clean earth. No puddling will be allowed.
- 11.2 Fill and backfill material shall be clean earth containing no vegetable matter, rubbish or debris, but may contain sound rocks, pieces of concrete and masonry material not over 6 inches in size, if well distributed in earth, but not in the top 12 inches or against foundations, walls, grade beams, or similar construction.

- 11.3 Clean excavations and areas to be filled of all topsoil, vegetable matter, refuse and debris before placing any fill or backfill. Do not backfill excavations against walls to be waterproofed until waterproofing is completed, protected and approved.
- 11.4 Perform filling and backfilling carefully so as not to damage other or affect the stability of any construction. Do backfilling only when the structure is fully capable of withstanding the resulting pressure.
- 11.5 Do not fill or backfill over frozen subgrade nor use any frozen material in fill or backfill.
- 11.6 Rough grade the lawn areas around all of the building to the limits of contract indicated on the drawings to a level below the finished grades as shown on the drawings. In the rough grading, bases for all terraces, banks, lawns, and paved areas shall be formed and compacted as specified or as noted on drawings.
- 11.7 Areas to be paved shall be graded to the depth required for the placing of paving material. Subgrade for drives, parking areas and service areas shall be compacted with a three wheel power roller of weight as specified in section on "Bituminous Paving" and in accordance with the requirements of Paragraph 210.3 of the current Form 408, Specifications of the Commonwealth of Pennsylvania, Department of Transportation.
- 11.8 Subgrade for walks shall be compacted with a two wheel roller of weight as specified in section on "Bituminous Paving" and in accordance with Paragraph 210.3 of Pennsylvania Form 408, subject to limiting conditions of Paragraph 11.1 above in regard to dimension from building wall.
- 11.9 Subgrade for lawns shall be compacted with a two wheel roller weighing not less than three tons subject to limitations of Paragraph 11.1 above.
- 11.10 Where wood sheet piling, form work, bracing or shoring is used, it shall be removed as the work progresses and the voids left shall be backfilled with 2,500 lb. concrete below the top of adjacent footings and foundations. Above the level, the backfill shall be as described above.
- 11.11 Where additional soil is deposited upon the site to reach required subgrade beneath terrace-entrance platforms or paving and where trenches are overfilled under other contracts, these areas shall be compacted and rolled with power roller or pneumatic tamper as specified above. Upon completion of work under this specification, rough grading as required by specification for subgrade for bituminous paving shall be completed. Hauling or moving of equipment shall not be allowed over the finished subgrade.

2B-12 BORROW EXCAVATION

- 12.1 It is intended that all excavated material be used for backfill, provided the material is suitable and has the approval of the Engineer/Inspector.
- 12.2 Topsoil under any structure shall be removed in its entirety and stock-piled for use in topsoiling and finish grading.

2B-13 ROUGH GRADING

13.1 Rough grading of all areas within the project, including excavated and filled sections and adjacent transition areas, shall be reasonably smooth, compacted and free from irregular surface changes. The degree of finish shall be that ordinarily obtainable from either blade-grader or scraper operations, except as otherwise specified. The rough graded surface shall be not more than 0.5 feet above or below the established grade of approved cross-section, with due allowance for topsoil or sod. All ditches, swales and gutters shall be finished to drain readily, but not to exceed 3 percent grade. Unless otherwise indicated on the drawings, the rough grade shall be evenly sloped to provide drainage away from building walls in all directions at a grade not less than 1/4 inch per foot. Rough grading shall also include roundings at top and bottom of banks and at other breaks in grade. In the rough grading, bases for all paved areas shall be formed and compacted as hereinafter specified, or as noted on the drawings.

2B-14 SLOPES

14.1 Slopes shall be trimmed neatly to the lines and rate of slope indicated on the drawings or as directed by the Engineer/Inspector, and the work left in a neat and acceptable condition.

2B-15 SUBGRADE

- 15.1 Areas to be paved shall be graded to the depth required for the placing of crushed stone aggregate. The finished subgrade surface shall be not more than 0.1 feet above or below the established grade shown on the drawings with due allowance for pavement depths. Subgrades for all paved areas shall be compacted to not less than 100 percent of the determined dry weight density.
- 15.2 The moisture content of subgrade material at the time of compaction shall be not more than 2 percentage points above the optimum moisture content, except that any subgrade which displays pronounced elasticity or deformation under construction equipment shall not have a moisture content greater than the optimum at the time of compaction or at the time of placing the overlaying construction. When the specified stability cannot be obtained, the material in the area shall be excavated to a depth that when replaced and recompacted at a moisture content not exceeding optimum, the subgrade will have the required stability. Unsatisfactory material so removed from excavated areas will be classified as unclassified excavation. In embankment areas, the material shall be removed at no expense to the Bureau.
- 15.3 Contractor shall provide crushed stone, gravel or slag bedding course under concrete slabs on earth as indicated on the drawings. The material to be used shall meet the applicable requirements of Section 703.3 PennDOT Form 408, for Type C or better coarse aggregate Size 2A.
- 15.4 Contractor shall provide crushed stone or gravel base course 6 inches in compacted thickness for all roadways. The aggregate shall be stone, gravel or slag meeting the requirements of Section 703.3 for Type C, or better, No. 2A material. The size and gradation of the material shall be determined in accordance with PTM No. 619. Approved granulated blast furnace slag will be acceptable. Approved granulated blast

furnace slag is the granular material formed when molten slag from iron making is rapidly quenched by immersion in water. Further, it shall not weigh more than 90 pounds per cubic foot (dry rodded unit weight, PTM No. 609). The material shall be reasonably uniform and free from harmful amounts of clay, silt, vegetation or other substances determined to be deleterious. It shall have a maximum size of 2 inches and not more than 20 percent passing the No. 100 sieve.

- (a) The crushed aggregate shall be spread uniformly on the subgrade to the full width of the base. The loose aggregate shall be spread to obtain a layer of the required depth after compaction. All segregated aggregate shall be removed and replaced with well graded aggregate. The crushed aggregate shall not be spread for a distance of more than an average day's work ahead of compacting. After each layer of aggregate has been spread, it shall be checked and all irregularities shall be satisfactorily corrected prior to rolling.
- (b) The crushed aggregate shall be rolled and thoroughly compacted with an approved roller as per Form 408, 108.05(c)3. Compaction shall progress gradually from the sides to the center with each succeeding pass uniformly overlapping the previous pass, and shall continue until the entire area is satisfactorily shaped and compacted to the required lines and grades. After the base course has been completed as specified, the surface smoothness shall be checked and any surface irregularities that exceed 1/2 inch in a given 10 foot length shall be remedied to the satisfaction of the Engineer/Inspector by loosening the surface and removing or adding material and rerolling the area.

2B-16 CLEANUP

16.1 Any paved area (either new or existing) or improved roadway over which equipment is moved or hauling operations are conducted, shall be kept clean and any soil or other material which may be brought upon the paved surfaces shall be removed promptly by the Contractor. Upon completion of rough grading, the Contractor shall clear away all debris and remove it from the site. All such cleanup work shall be done with no additional cost to the Commission.

2B-17 REPAIR

17.1 The Contractor shall patch, repair and/or replace all bituminous and concrete paving, curbs and walkways and all stone surfaced driveways as affected by the installation and construction of all work within the contract limits and any adjacent existing paving, curbs or inlets damaged by these operations.

2B-18 ROADWAY AND PARKING AREA SHOULDERS

18.1 This work shall consist of constructing 2A stone shoulders on both sides of the roadway and parking areas in accordance with these specifications and to the lines, grades and width shown on the drawings or established by the Engineer/Inspector.

2B-19 RIPRAP MATERIAL

- 19.1 The work covered by this item consists of furnishing all labor, equipment and materials, and performing all operations in connection with the construction of riprap slope protection as shown on the drawings or as directed by the Engineer in accordance with these specifications and applicable drawings.
- 19.2 Riprap shall consist of sound durable rock, insoluble in water and of such quality as, in the opinion of the Engineer/Inspector, is sufficient to insure long time durability. Friable, stratified rocks such as shales and rocks liable to decompose in water such as claystones shall not be approved. Sources of riprap shall be subject to approval by the Engineer/Inspector but approval of any source of riprap shall not be construed as approval of all the material from this source. The right is reserved to reject localized areas, strata, or channels within an approved area or zone when, in the opinion of the Engineer/Inspector, the material has disintegrated, weathered badly, or is otherwise unsatisfactory for the intended use.
- 19.3 The material shall be free of objectionable amounts of earth, quarry dust or other foreign material; however, washing will not be required. Slabs and slivers will not be acceptable. Slabs and slivers shall be defined as pieces for which the smallest dimension is less than one-third (1/3) of the largest dimension of the piece. The mass shall be reasonably well graded and the weight of individual stones shall vary between 50 and 750 pounds. Seventy-five percent (75%) of the mass shall be of stones weighing 250 pounds or more. Unless otherwise specified, the determination of weights will be made by visual inspection. Sampling and testing will not be required, but the material used shall be acceptable to the Engineer/Inspector.

2B-20 FOUNDATION PREPARATION

20.1 Areas on which riprap is to be placed shall be trimmed and dressed to conform to cross-sections shown on the plans.

2B-21 PLACING RIPRAP

- 21.1 Stone for riprap shall be placed and spread on a 6" gravel filter blanket in such a manner as to produce a reasonably well-graded mass of rock with the minimum practicable percentage of voids and shall be constructed to the lines and grades shown on the plans directed by the Engineer/Inspector.
- 21.2 Fines shall be well distributed in order to chink the voids between large pieces insofar as practicable. The exposed surface shall have a preponderance of the smaller stone placed so that the surface conforms closely to required line and grade.
- 21.3 Riprap shall be placed to its full course thickness at one operation and in such a manner as to avoid displacing the underlying material. Placing riprap in layers will not be permitted. The larger stones shall be well distributed and the entire mass of stones shall be roughly graded to conform to the approximate gradation specified in Paragraph 2B-19.3. The finished riprap shall be free from objectionable pockets of small stones and clusters of larger stones. Hand placing to a limited extent may be required, but only to the extent necessary to secure the results specified above. The use of a tractor equipped with a bulldozer blade, stone rake or any similar equipment

will not be acceptable for placement of riprap. The riprap shall be placed to the depth shown on the plans and the finished surface of the riprap slope protection shall be in accordance with the lines and grades shown on the plans.

2B-22 MORTARED RUBBLE GUTTER

22.1 This work shall consist of constructing mortared rubble gutter in accordance with Section 642 of Form 408, 1976 and shall be constructed with reasonably close conformity to the lines and grades shown on the drawings or established by the Engineer.

- END OF SECTION -

Section 2C - Finish Grading and Landscaping

2C-1 WORK INCLUDED

- 1.1 The work in this section includes all labor, supervision, equipment, tools, materials, transportation, and all means of construction necessary to perform the finishing grading, topsoiling, seeding, soil supplements and mulching to the limits shown on the drawings, described in this specification and as is necessary to repair areas disturbed by construction.
- 1.2 In general, all disturbed areas shall be topsoiled and seeded unless another form of surface treatment is indicated.

2C-2 RELATED SECTIONS

- 2.1 Other divisions and sections of these specifications which are related to this section are:
 - (a) General Conditions, DGS Dated 1975
 - (b) Division 1 General
 - (c) Section 1A Erosion and Sedimentation Control Plan
 - (d) Section 2B Earthwork

2C-3 FINISHING GRADING

3.1 The Contractor shall use the topsoil removed from the site as hereinbefore specified to complete the finish grading. The finish grading work shall not be completed until the installation of all underground utilities, pipelines and structures have been completed.

2C-4 TOPSOIL

4.1 Areas indicated on the drawings as requiring seeding and all disturbed areas shall be finished with a minimum layer of 4 inches of topsoil and seeded as specified herein.

2C-5 SEEDING AND SOIL SUPPLEMENTS

- 5.1 This work shall consist of furnishing and placing seed and soil supplements within reasonably close conformity to the lines, grades and locations as designated on the plans or in accordance with the specifications. Permanent seeding shall be performed within the specified seeding dates as soon as possible following the completion of finished grading.
 - 5.2 This work will adhere to PennDOT Form 408, 1976, Section 804.

5.3 Formula "B" will be used on areas flatter than 3 to 1 slopes and Formula "C" will be used on areas steeper than 3 to 1.

2C-6 MULCHING

- 6.1 This work shall consist of furnishing, placing, anchoring, and maintaining an approved mulch within reasonably close conformity to the lines, grade and locations as shown on the plans or as directed by the Engineer.
 - 6.2 This work will adhere to PennDOT Form 408, 1976, Section 805.

- END OF SECTION -

Section 2D - Bituminous Paving

2D-1 WORK INCLUDED

1.1 This work shall consist of constructing a binder course 1-1/2 inches in compacted thickness and a wearing course 1 inch in compacted thickness of hot-mixed, hot-laid asphalt concrete ID-2A, in accordance with Section 420 and 421 of PennDOT Form 408, 1976, on a prepared base course within plus or minus 0.01 of a foot of the lines, grades and width shown on the drawings and as specified for access roads, parking areas and walks.

2D-2 RELATED SECTIONS

- 2.1 Other divisions and sections of these specifications which are related to this section are:
 - (a) General Conditions, DGS Dated 1975
 - (b) Division 1 General
 - (c) Section 2B Earthwork

2D-3 CONSTRUCTION REQUIREMENTS

- 3.1 Weather Limitations. The placing of bituminous concrete shall terminate between October 15 and October 31 and shall not be resumed prior to April 1 to April 15 unless otherwise approved in writing by the Engineer/Inspector.
 - (a) When the air temperature falls below 50 degrees F., extra precautions shall be taken in drying the aggregate, controlling the temperature of the delivered material and compacting the mixture. Bituminous concrete shall not be placed on wet surfaces, nor when the air temperature is 40 degrees F., or lower, nor when the temperature of the pavement, base or binder on which it is to be placed is 40 degrees F. or lower.
- 3.2 Spreading and Finishing. The temperature of the binder or wearing course mixture when laid shall not vary more than 15 degrees F. from the mixed temperature.
 - (a) The mixture shall be spread or struck off by mechanical spreading and finishing equipment for the entire width or for such partial-width lanes as may be practical. The screed assembly shall be adjustable to give the cross section required and shall be designed and operated to provide a binder course or wearing course of the required depth.
 - (b) On areas where irregularities or unavoidable obstacles make the use of mechanical spreading and finishing equipment impracticable, the mixture shall be placed and screeded by hand to give the required compacted depth.

- (c) Adjacent to flush curbs, gutters, liners and structures, the surface mixture shall be placed uniformly high so that, when compacted, it will be slightly above the edge of the abutting structure.
- (d) When the wearing course is placed adjacent to curbs and ramps to form a bituminous gutter and before the surface has cooled, it shall be sealed with hot bituminous material of the class and type designated for the surface course for a distance of 12 inches from the curb. The sealing material shall be evenly applied to the surface by means of squee-gees immediately after final rolling and sealed with hot irons to completely fill the surface voids and provide a watertight joint along the curb and ramps. Excess bituminous material shall be removed from the wearing course.
- 3.3 Compaction. Immediately after the bituminous mixture has been spread, struck off and surface irregularities adjusted, it shall be thoroughly and uniformly compacted by rolling.
 - (a) The surface shall be rolled when the mixture is in the proper condition and when the rolling does not cause undue displacement, cracking or shoving.
 - (b) The number, weight and type of rollers furnished shall be sufficient to obtain the required compaction while the mixture is in a workable condition. The sequence of rolling operations and the selection of roller types shall provide the specified pavement density.
 - (c) Rolling shall progress continuously until the specified density, 95 percent of the corresponding daily plant Marshall density, has been attained. Finish rolling shall continue until all roller marks are eliminated.
 - (d) The motion of the rollers shall be slow enough at all times to avoid displacement of the hot mixture and any displacement resulting from reversing the direction of the rollers, or from any other cause, shall be satisfactorily corrected.
 - (e) The wheels of steel-wheel rollers shall be kept moist and clean to prevent adhesion of the fresh material, but an excess of water will not be permitted. Pneumatic-tired roller wheels shall be kept clean by an approved method to prevent adhesion of the fresh material.
 - (f) When either the binder or wearing course fails to comply with the density requirements herein specified, additional compaction may be applied, when permitted and as directed, to attain the required density. If satisfactory density cannot be attained, the contractor shall be required to remove and replace any affected area.
 - (g) All irregularities in the binder course shall be remedied before the wearing course is placed. All binder becoming coated with any

foreign material shall be satisfactorily cleaned and treated. If the binder course cannot be satisfactorily cleaned, it shall be removed and replaced.

- (h) For a distance of 8 inches around all structures, adjacent to urbing, gutters, railway tracks and all other locations inaccessible to rollers, the compaction shall be effected with hot iron tampers weighing not less than 25 pounds and having a bearing area not exceeding 48 square inches, or with mechanical vibrating hand tampers, when approved.
- (i) Any mixture that becomes loose and broken, mixed with dirt, or in any way defective shall be removed and replaced with fresh hot mixture, which shall be compacted to conform with the surrounding area. Any area showing an excess or deficiency of bituminous material shall be removed or replaced.
- 3.4 The longitudinal joint in one layer shall offset that in the layer immediately below by approximately 6 inches. Where the abutting lane is not placed the same day or when the abutting lane has cooled to less than 150 degrees F., or where the abutting joint is distorted, the edge of the lane shall be carefully trimmed to line as required and painted with a very thin coating of bituminous material of the class and type designated for the surface course.
- 3.5 Transverse joints in both binder and wearing courses shall be carefully constructed. Sawing of joints or use of a bulkhead is permitted if the bituminous material is thoroughly compacted to provide a smooth riding surface. Joints shall be straight-edged to assure smoothness. In either case, the joint face shall be painted with a very thin coating of bituminous material of the class and type designated for the surface course before the fresh material is placed against it. To obtain thorough compaction of these joints, cross rolling may be required.
- 3.6 Unless otherwise directed, density samples, each approximating a 12-inch by 12-inch slab, shall be cut from the completed binder course and wearing course by drilling to obtain cores of a minimum diameter of 4 inches.
 - (a) All the holes resulting from sampling shall be backfilled with acceptable material and satisfactorily compacted.
 - (b) Cores and tests shall be made as directed by the Engineer.
 - (c) Care shall be taken that the samples are not compressed, bent or distorted in any way during cutting, handling, transporting or storage. The samples shall be accurately identified and delivered for testing to the plant laboratory by the contractor. The samples, immediately after delivery, shall be tested for density at the approved laboratory. Each test shall consist of the average of the results obtained on at least 2 specimens of the required size taken from each slab sample. The density shall be reported as field density, computed and reported as percent of Marshall plant density, based on the average of the Marshall plant densities obtained during the corresponding day's production.

- (d) When unsatisfactory compaction is indicated by tests, check samples shall be taken to provide samples of either the binder or wearing course which are suitable for testing. Check samples of wearing course shall be removed by core drilling through both the wearing and binder courses and preparing the samples for testing by sawing off the underlying binder course.
- 3.7 For the purpose of determining the surface tolerance, the finished surface shall be tested with a 10-foot straight edge. Any irregularities which vary from the testing edge of the straightedge between any two contacts with the surface by more than 3/16 inch shall be satisfactorily corrected. Irregularities which may develop before the completion of rolling shall be remedied by loosening the surface mixture and removing or adding material as required. Should any irregularities or defects remain after the final compaction, the surface course shall be promptly removed and sufficient new material laid to form a true and even surface or otherwise satisfactorily corrected. All minor surface projections, joints and minor honeycombed surfaces shall be ironed smoothly to grade as may be directed.

2D-4 BITUMINOUS CONCRETE CURB

4.1 This work shall consist of constructing a hot-mixed, hot-laid bituminous concrete curb on a completed bituminous surface in accordance with these specifications and within reasonably close conformity to the lines and grades shown on the drawings or established by the Engineer. This curb shall conform to the details shown on the drawings. The materials and construction requirements for this curbing shall conform to Section 636 of PennDOT Form 408, 1976.

2D-5 PAINTING PARKING STALL LINES

5.1 This work shall consist of the application of parking stall lines with white paint on the parking lot at the locations indicated on the drawings. The materials and construction requirements shall conform to Section 962 of PennDOT Form 408, 1976.

- END OF SECTION -

Section 2E - Floating Docks and Ramps

2E-1 SCOPE OF WORK

- 1.1 The work to be accomplished under this section includes but is not necessarily limited to the following:
 - (a) Floating docks
 - (b) Ramps w/hand rails

2E-2 WORK INCLUDED

2.1 The Contractor shall furnish all labor, equipment and materials and perform all operations in connection with the construction of floating docks as shown on the drawings or as directed by the A/E in accordance with these specifications and applicable drawings.

2E-3 GOVERNING SPECIFICATIONS

- 3.1 This work shall include but is not limited to furnishing floating docks, anchoring system, dock hardware, and all other items incidental to the proper installation of floating docks.
- 3.2 The dock units shall be heavy duty designed for the following loads and conditions:

Vertical

- (a) Live load shall be not less than 15 psf
- (b) Combined dead load plus live load shall be not less than 50 psf. Dock units at dead loading in the water shall maintain a freeboard of approximately 24". At the combined loading of 50 psf, a free board of approximately 12" shall be maintained.

Horizontal

- (a) Wind Uniform load from any direction, 10 psf assuming 100% boat occupancy. Profile height of boats to be as recommended by Manual 50 "ASCE Journal of the Waterways and Harbors Division", Page 106, dated 1969.
- 3.3 All units must be joined in a manner so that the sections may be separated for winter storage on land. Attachments between units shall be capable of withstanding loads as specified in Paragraph 3.2 above. The means of attachment shall be suitably bolted, pinned or protected to prevent loosening or detachment due to vibration, wave action, wind, dead or live loads. Assembly and disassembly of attachments between units must be accomplished using standard hand tools and must be accessible from the dock's upper surface. Attachments shall be protected from environmental corrosion so as to be functional at any time.

- 3.4 Wood deck shall consist of 2"x4", 2"x6" and/or 2"x8" planks of southern yellow pine, Grade No. 2 or better, pressure treated with pentachlorophenal at 0.5 lbs./cu. ft. minimum or with a recognized wood preservative, pressure applied according to directions of the preservative manufacturer.
- 3.5 Structural steel shall consist of Standard American Institute of Steel Construction (AISC) A-36 Structural Shapes and ASTM A-526 Carbon Steel Shapes. Light gauge members shall meet specifications of American Iron and Steel Institute. All structural shapes and light gauge members shall be hot-dipped galvanized in accordance with ASTM A-123.
- 3.6 Connections shall be a combination of bolts and welds. Bolted connections shall be in accordance with standard AISC Specifications. Welds shall be executed in accordance with the provisions of the American Welding Society Specifications.
- 3.7 The pontoons shall consist of galvanized steel, fiberglass or plastic shells which resist physical or chemical damage and completely enclose the flotation material. The shells shall be completely filled with foamed-in-place polystyrene in accordance with Class I of ASTM Designation D-2135-62-T. Pontoons to have Bitumastic (coal tar epoxy) coating, Kopper Spec. 300-M or equal.
- 3.8 Ramps shall be designed for dead load plus a minimum live load of 50 psf. Handrials shall be capable of withstanding a horizontal thrust of 50 lbs. per lineal foot applied at the top of the railing in accordance with Section 3.1.2 of the American Standard Building Code.
- 3.9 All docks and ramps shall be designed and fabricated with a minimum 2" diameter Schedule 40 pipe torsion bar joining substructure members and thereby preventing torsional displacement of the deck surface. Pipe shall be welded to members via 3/16" minimum fillet weld. Welds shall be repaired with one coat of "rustoleum" and one coal of "galvalox" or equals.
- 3.10 Cleats shall be provided on the outerside of the units located three feet in from each end. Cleats shall be 12" cast iron units as manufactured by Wilcox-Critterden or equal and shall be securely attached by through bolting or welding. Surfaces shall be smooth and rounded so as to prevent damage to mooring lines.
- 3.11 Rubrail shall be provided on all sides of units that are exposed to boat traffic and shall consist of 2"x6" wood planks conforming to Paragraph 3.4 above with polyvinyl chlorine plastic bumper strip as shown on drawings. Fastening devices shall be countersunk to prevent contact to adjacent boat hulls.
- 3.12 The vendor shall guarantee all units against defects in materials and workmanship for a period of one year following installation.
- 3.13 All dock units and components to be as manufactured by United McGill Corporation or approved equal.

Section 2F - Wooden Guard Posts

2F-1 WORK INCLUDED

- 1.1 The work to be accomplished under this section includes but is not necessarily limited to the following:
 - (a) Wooden guard posts

2F-2 WOODEN GUARD POSTS

- 2.1 The Contractor shall furnish all labor, equipment and materials, and perform all operations in connection with the construction of wooden guard posts as shown on the drawings or as directed by the Engineer/Inspector in accordance with these specifications and applicable drawings.
- 2.2 This work shall include but is not limited to furnishing treated wooden posts, digging post holes, backfilling and tamping, cleanup, and all other items incidental to the proper installation of wooden guard posts.
- 2.3 Posts shall be cut as indicated on the drawings and shall have a minimum diameter of 7 inches and a maximum of 10 inches throughout and shall be at least 6 feet long. All posts shall have at least one side which shall be within 1 inch of being straight for the portion above the ground line. This side shall be turned toward the road surface. No side of a post above the ground line shall deviate more than 3 inches from a straight line.
- 2.4 Posts shall be manually set or mechanically driven with the butt end in the ground, plumb and firm, spaced and cut as indicated on the drawings, unless otherwise directed, and to the lines and grades indicated. Post shall be set according to size in order to eliminate a marked contract between adjacent posts. Post holes shall be backfilled to the ground line with approved material in thoroughly compacted 4 inch layers.

Section 2G - Chain Link Fence

2G-1 WORK INCLUDED

- 1.1 The work to be accomplished under this section includes but is not necessarily limited to the following:
 - (a) Chain link fence

2G-2 CHAIN LINK FENCE

- 2.1 The Contractor shall furnish and install where indicated on the drawings an 10 foot high chain link type fence. Fence installation shall include metal posts, metal braces and fittings, wire fabric, gates, top and bottom rail, and accessories as specified under fencing materials. The chain link fence shall be the Cyclone Type II fence as manufactured by U. S. Steel, Pittsburgh, Pennsylvania, or approved equal. Any proposed alternatives shall meet all specifications of the Cyclone Type II fence.
- 2.2 Fence shall be erected to location as indicated on the drawings. The completed fence shall be plumb and taunt and shall conform to the best established practices of this work. Where rock is encountered, a hole shall be drilled a minimum of 12 inches into the rock. The diameter of the hole shall be 1/2 inch larger than the maximum dimensions of the post. The post shall be grouted in place using Class B concrete.
- 2.3 E usting 6' high fence shall be removed and disposed of by Contractor in area designated on drawing.
- 2.4 Contractor must be experienced in installations of this type and must examine conditions under which fence and gates are to be installed. Contractor shall not proceed until final grading is completed.
- 2.5 Contractor shall submit three samples approximately 6" long or 6" square of fabric material, post section and typical accessories. Contractor shall submit shop drawings, including details illustrating fence height, sizes of posts, rails, braces, gates, and footing and accessories. Fencing materials shall be delivered in manufacturer's original packaging with all tags and labels intact and legible. Material shall be handled and stored in such manner as to avoid damage.
- 2.6 The chain link fabric shall be one piece width of 8 feet. The fabric shall consist of No. 9 gauge wire woven in a 2" mesh. Top and bottom of fabric shall have twisted and barbed selvages. The finish for the fabric shall be heavy galvanized, 2.0 ounces zinc per square foot in accordance with ASTM Specification A.392, Class II.
- 2.7 All tubular members shall comply with provisions of ASTM-Al20 for weight and coating. All structural and roll formed shapes shall conform to provisions of ASTM Al23 for galvanized coating.
- 2.8 End, corner and pull posts shall be a 3-1/2"x3-1/2" rolled, formed section weighing 5.14 pounds per lineal foot. The corner posts shall be placed at angle points

in horizontal alignment and/or where directed by the Engineer/Inspector. Pull posts shall be provided at angle points in vertical alignment, at maximum 500 foot intervals between end or corner posts in level terrain, and/or where directed by the Engineer/Inspector.

- 2.9 Line posts shall be an H section weighing 2.7 pounds per lineal foot evenly spaced 10 feet or less apart.
- 2.10 Gate posts shall be 4 inch O.D. pipe weighing 9.1 pounds per lineal foot. Bracing for gate posts shall meet the requirements specified for end or corner posts.
- 2.11 Top and bottom rail shall be 1.625"x1.25" roll formed sections weighing 1.35 pounds per lineal foot. Rails shall be furnished in manufacturer's standard lengths of approximately 21 feet with couplings approximately 6 feet long for each joint, one coupling in each five to have expansion spring. Provide means for attaching top rail securely to each gate, corner, pull, and end posts. Top rail shall form continuous brace from end to end of each rum of fence.
- 2.12 The post bracing assembly shall match the top rail for a horizontal brace and have a 3/8 inch diameter rod with adjustable take-up for the diagonal truss.
- 2.13 All accessories except tie wires shall be galvanized to comply with ASTM-A153.
- 2.14 All post tops shall be pressed steel or malleable iron, designed as a weathertight closure cap (for tubular posts). Provide one cap for each post unless equal protection is afforded by combination post top cap. Where top rail is used, provide tops to permit passage of top rail.
- 2.15 Stretcher bars for tubular end, cornea, pull, or gate posts shall be one piece lengths equal to full height of fabric with a minimum cross-section of 3/12"x 3/4". Provide one stretcher bar for each gate and end post, and two for each corner and pull post.
- 2.16 Stretcher bar bands shall be heavy pressed steel, spaced not over 15" o.c. to secure stretcher bars to tubular end, corner pull and gate post.
- 2.17 Extension arms shall be hot-dip galvanized. All intermediate posts fitted with non-climable extension arms, made of pressed steel riveted to heavy malleable iron base. All end and corner posts are fitted with heavy malleable iron arms. These arms carry three barbed wires securely fastened. Topmost barbed wire 12 inches above the fabric.
 - 2.18 Security wire shall be three strands special stainless steel ribbon wire.
- 2.19 Gate for fence shall be a double gate using two leaves of size indicated on the drawings. Direction of gate swing shall be as indicated on the drawings. Gate perimeter frames shall be 1.90" o.d. tubular members. Additional horizontal and vertical members shall be provided to ensure proper gate operation and for attachment of fabric hardware and accessories.

- 2.20 Gate frames shall be assembled by welding or fittings and rivets for rigid connections. Use same fabric as for fence, unless otherwise indicated. Install fabric with stretcher bars at vertical edges and tie at top and bottom edges. Attach stretcher bars to gate frame at not more than 15" o.c. Attach hardware with rivets or by other means which will provide security against removal or breakage.
- 2.21 Diagonal cross-bracing shall be provided consisting of 3/8 inch diameter adjustable length truss rods on gates where necessary to provide frame rigidity without sag or twist.
 - 2.22 Provide the following hardware and accessories for each gate:
 - (a) Hinges shall be of pressed steel or malleable iron to suite gate size; non-lift off type; offset to permit 180° gate opening. Provide one pair of hinges for each leaf.
 - (b) Latch shall be forked type or plunger-bar type to permit operation from either side of gate. Provide padlock eye as integral part of latch.

DIVISION 3 - CONCRETE

Section 3A - Cast in Place Concrete

3A-1 SCOPE OF WORK

1.1 The Contractor shall furnish all labor, materials, equipment and services required for the installation of all plain and reinforced concrete work indicated on the Contract drawings and/or described in these specifications. Included with the concrete work are the furnishing and installing of all appliances, scaffolding runways, forms, joints, and all steel reinforcement.

3A-2 WORK INCLUDED

2.1 The work in general includes, but is not necessarily limited to, construction of the concrete wharfs, boat ramp, and culvert end walls.

3A-3 GOVERNING SPECIFICATIONS

- 3.1 The following Sections of PennDOT Form 408, dated 1976, shall govern the use of cast in place concrete for this project:
 - (a) Section 700 Material Details for Cement, Fine Aggregate and Coarse Aggregate
 - (b) Section 704 Cement Concrete and Ready-Mixed Cement Concrete
 - (c) Section 1000 Structures for Construction Methods Including Forms, Placement, Finishing, Curing, etc.
 - 3.2 The concrete for this project shall be Class "A"-Air Entrained, 3300 p.s.i.
- 3.3 Four test cylinders will be made, as per above mentioned specifications, from each day's pour, as directed by the Engineer. Curing of these test cylinders shall be under the same conditions as the concrete structure.
- 3.4 The surface of the ramp shall be finished with a coarse bristle broom with score lines running across the ramp. This finish is required to improve the tire traction when launching and retrieving boats, especially when the ramp surface is wet. The Engineer/Inspector is to approve or modify the finish of the first concrete pour. Subsequent ramp pours to be finished the same.

Section 3B - Concrete Reinforcement

3B-1 DESCRIPTION

- 1.1 This work shall consist of furnishing and placing reinforcement bars for the various items of cement concrete construction in accordance with these specifications and within reasonably close conformity to the lines, dimensions and location shown on the drawings.
- 1.2 Section 1002 Reinforcement Bars of PennDOT Form 408, dated 1976, shall govern.

Section 3C - Precast Concrete Plank

3C-1 SCOPE AND REQUIRED WORK

- 1.1 The work covered by this section consists of furnishing all labor, equipment, supervision, and appurtenances necessary to complete and install all precast concrete planks required for the project in strict accordance with this section of the specifications and the drawings.
- 1.2 The prefabricated plank shall be 10 feet long by 15 inches wide by 4 inches deep and reinforced with No. 4 deformed reinforcing bars with 3/8 inch by 1-1/2 inch by 1 foot 11 inches long steel strap welded to bars as shown on PFC Drawing No. FC-100A-10C.
- 1.3 The finish on the surface of the plank shall be irregular. Use two stripes 3 inches wide, battered each side, by 1/2 inch deep and run the full length of the plank.
- 1.4 Each plank shall be made of 0.15 cubic yards of PennDOT Class AA (3750 psi) concrete and cured for 28 days before moved or installed.

DIVISION 4 - MISCELLANEOUS ITEMS

Section 4A - Painting and Welding

4A-1 SCOPE AND REQUIRED WORK

- 1.1 The work covered by this section consists of furnishing all labor, equipment, supervision and appurtenances necessary to complete all painting and welding required for the project in strict accordance with this section of the specifications and the drawings.
- 1.2 All metal work, except surfaces to be embedded in concrete, finished, galvanized or machined surfaces, shall be cleaned and painted in a thorough manner.
- 1.3 All scale, rust, dirt, oil or other foreign substances shall be removed from surfaces to be painted by means of wire brushes, scrapers, mineral spirits or some other effective means approved by the Engineer/Inspector. All surfaces of metal parts to be painted shall receive one shop prime coat of paint and two field coats as directed.
- 1.4 All ferrous metal shall be painted and shall receive one shop coat of metal primer applied by a brush in a thorough manner to prevent corrosion. All shop painted surfaces, inaccessible after fabrication, shall receive an additional shop coat of the same primer before assembling.
- and free from corrosion. The surfaces shall be repainted or retouched from time to time if necessary. After erection or installation of all metal work, all blisters shall be removed and scraped and bare spots shall be touched up with metal primer prior to the application of the final two field coats. Field coats shall be aluminum paint made of aluminum powder or aluminum paste with spar varnish vehicle or prepared aluminum paint produced by a reputable paint manufacturer. First coat shall be colored to distinguish it from the second coat; second coat shall be applied after first coat has thoroughly dried.
- 1.6 All welding shall be done in a thorough workmanlike manner in accordance with the Specifications of the American Welding Society.

Section 4B - Dock Stiff Arms

4B-1 DOCK STIFF ARMS

1.1 Standard steel pipe (Schedule 40) shall be used to construct stiff arms. Pipe shall be galvanized and in the following sizes:

| | I.D. | 0.D. | Wt./L.F. |
|--------|-------|------|-----------|
| 1-1/2" | 1.610 | 1.90 | 2.72 lbs. |
| 3" | 3.068 | 3.50 | 7.58 lbs. |

Section 4C - Chain

4C-1 CHAIN

1.1 Chain shall be 1/2" galvanized, proof coil chain.

DIVISION 5 - MOISTURE PROOFING

Section 5A - Joints and Sealant

5A-1 JOINT FILLER

1.1 All expansion joints shall be filled with 1/2" preformed standard cork expansion joint filler as manufactured by Servicized Products Corporation, Chicago, Illinois, Code 4324, or an approved equal. Joint filler shall be installed before the concrete is poured and securely held in place in a plane perpendicular to the slab surface. It shall extend through the entire thickness of the slab and shall be 1/2" below the finished surface.

5A-2 JOINT CAULKING

- 2.1 E mansion joints shall be installed as indicated on the drawing and shall conform to the specifications of polyvinylchloride water stop, cork joint material, sealing compound, dowel bars and all other items to make the expansion joint complete.
- 2.2 All exposed joints shall be caulked or sealed with a two-part polysulfide cold-applied joint sealing compound gun grade, gray color.

5A-3 CONSTRUCTION JOINTS

3.1 Joints not shown on the drawings shall be so made and located as to least impair the strength of the structure, as directed by the Engineer/Inspector. In general, they shall be located near the middle of the span of the slabs or walls. All reinforcing steel and mesh shall be continued across construction joints not intended for expansion or contraction of the structure. Keys, additional reinforcing and inclined dowels shall be provided as directed by the Engineer/Inspector. Longitudinal keys at least 1-1/2" deep shall be provided in all joints in walls.

DIVISION 6 - MECHANICAL

Section 6A - Storm Water Drains

6A-1 WORK INCLUDED

- 1.1 The work covered by this section consists of furnishing all labor, equipment, supervision and appurtenances necessary to complete all site storm water drains required for the project in strict accordance with this section of the specifications and the drawings, including, but not limited to:
 - (a) Storm water drain pipes
 - (b) Concrete end walls

6A-2 RELATED SECTIONS

- 2.1 Other divisions and sections of these specifications which are related to this section are:
 - (a) General Conditions, DGS dated 1975
 - (b) Division 1 General
 - (c) Section 2B Earthwork
 - (d) Section 3A Concrete
 - (e) Section 4A Miscellaneous Items

6A-3 MATERIALS

- 3.1 Corrugated Metal Pipe (CMP) and/or Reinforced Concrete Cement Pipe (RCCP):
 - (a) Corrugated metal pipe shall conform to all the requirements of Class I, Section 707.2, PennDOT Form 408. The pipe gauges and types are to be as shown on the drawings.
 - (b) Reinforced cement concrete pipe shall conform to the requirements of Section 706.1, PennDOT Form 408.

6A-4 INSTALLATION

4.1 The banks of trenches shall be kept as nearly vertical as practicable and where required shall be properly sheeted and braced. In all cases, the contractor shall provide sheeting and bracing in all trenches 4 feet or more in depth in accordance with Department of Labor and Industry Regulations, Commonwealth of Pennsylvania. Trenches shall be of sufficient width to provide a free working space on each side of the pipe of 12 inches between the pipe and the sides of the trench. Trenches shall be excavated to exact depth and equal grades as required for bedding pipes.

4.2 When pipe or conduit is to be laid in fill, the embankment shall be brought to a height of at least two feet above the proposed top of the pipe before the trench is excavated. The embankment shall then be excavated to the proper form and graded, pipe placed and embankment carried to the height shown on the drawings, material being replaced and tamped in layers as described herein these specifications.

6A-5 LAYING

- 5.1 Pipe laying shall proceed upgrade with pipe laid carefully, hubs upgrade, spigot ends fully entered into adjacent hubs and true to lines and grades given. Grade stakes, grade bars and grade lines shall be set and maintained by the contractor in the manner directed by the Engineer/Inspector to maintain a true pipeline and grade at all times. Every pipe shall be inspected before laying and any containing cracks or damage in any way shall not be used.
- 5.2 Each pipe shall be firmly held in position so that the invert forms a continuous grade with the invert of the pipe previously placed. The interior of all pipe and the inside of the bell and outside of the spigot shall be thoroughly cleaned of all foreign matter before being lowered into the trench and shall be kept clean during laying operations by means of plugs or other approved methods. Under no condition shall pipe be laid in water or on subgrade containing frost and no pipe shall be laid when trench conditions are unsuitable for such work.

6A-6 BEDDING

6.1 The pipe shall be bedded with care in soil foundation shaped to fit the pipe exterior to a minimum depth of 15 percent of the outside diameter.

6A-7 LENGTH OF OPEN TRENCH

- 7.1 The Engineer/Inspector has the right to limit the amount of trench opened in advance of pipe laying and the amount of pipe laid in advance of backfilling.
- 7.2 The Engineer/Inspector shall be empowered at any time to require the refilling of open trenches over completed pipe lines, if in his judgment such action is necessary and the contractor shall thereby have no claims for extra compensation even though to accomplish said refilling he is compelled to temporarily stop excavation or other work at any place.
- 7.3 If work is stopped on any trench of excavation for any reason except by order of the Engineer/Inspector and the excavation is left open for an unreasonable length of time (in the opinion of the Engineer/Inspector) in advance of construction, the contractor shall, if so directed, refill such trench or excavation at his own expense and shall not again open said trench until he is ready to complete the structure or work therein.

6A-8 BACKFILL

8.1 All trenches shall be left open for inspection and approval by the Engineer/Inspector. Sufficient allowance shall be made after notice is given that

the work is ready for inspection, for making all examinations and tests. Should the Contractor backfill any trench before all these operations have been completed, he will be required to reopen the trench at his own expense, if requested. Under no circumstances shall excavated material remain, even temporarily, where it will interfere with the project or other contractor's operations.

- 8.2 All backfill shall be subject to approval by the Engineer/Inspector and shall consist of earth, loam, sandy clay, sand and gravel, and soft shale, free of large clods of earth and stones, or other material if so directed by the Engineer/Inspector.
- 8.3 Backfill free of stones, cinders and slag shall be deposited by hand shovels and compacted on each side of the pipe simultaneously for the full width of the trench in layers not exceeding four inches in loose thickness until an elevation of at least one foot above the pipe is reached. The remainder of the backfill in trenches more than four feet from the edge of pavements in areas not requiring pavement replacements and in areas other than driveways, roadways and cartways may then be deposited and shall be compacted in layers not exceeding six inches in loose depth. In the previously excluded areas, backfill shall be deposited and compacted in four inch layers. All compaction shall be 95% of the determined dry weight density and performed with power driven hand operated tampers designed for the type of work required. Any excavations improperly backfilled or where settlement occurs shall be reopened to the depth required for proper compaction, then refilled and compacted with the surface restored to the required grade and compaction, mounded over and smoothed off.

6A-9 TESTING

9.1 Completed lines shall be tested by "lamping" and shall offer <u>full moon</u> visibility at any and all sections to insure proper alignment and grade.

Section 6B - Inlet Grates and Frames

6B-1 INLET GRATES AND FRAMES

1.1 Contractor shall furnish and install cast iron grating and frame over catch basins as shown on the drawings. The grating and frame shall be of the dimensions as shown and shall be cast iron No. R3475-3, as manufactured by the Neenah Foundry Co. or approved equal.

DIVISION 7 - METAL WORK

Section 7A - Steel Sheet Piling

7A-1 WORK INCLUDED

1.1 The work covered by this section shall consist of the furnishing, driving and coating of steel sheet piling and bracing as indicated on the drawings and/or as described in these specifications.

7A-2 MATERIALS

- 2.1 Steêl sheet piling and appurtenant material shall conform to ASTM Designation A328 Grade latest revision. The sheet piling shall be of an interlocking type of the Bethlehem Steel Corporation, Section PMA-22 and CP-40, or an equivalent approved by the Engineer/Inspector.
- 2.2 Coating shall be two coat painted waterproofing and shall consist of a primer and two coats of hot bituminous material Section 680.2, PennDOT Form 408.
 - 2.3 Structural steel shall conform to ASTM A-36.

7A-3 CONSTRUCTION METHODS

- 3.1 All equipment for placing and driving sheet piling shall be of approved type and furnished by the Contractor.
- 3.2 Sheeting may be driven with drop, steam or air hammers. The hammers shall be of a capacity to drive the sheeting to the depths shown on the plans under the soil conditions encountered; and of a type to distribute the blow throughout the crosssection of the steel sheet. Hammers shall be operated at the pressure and speed recommended by the manufacturer and for the full stroke for which the hammer is designed.
- 3.3 Pile driver leads shall be constructed to allow free movement of the hammer and shall be held in true vertical or inclined positions, as required, by guys or stiff braces to insure support to the sheet during driving. Leads shall be of sufficient length so that a follower will not be necessary under normal conditions.
- 3.4 Steel sheeting shall be driven to reasonably close conformity to the lines, grades and locations shown on the plans or as directed by the Engineer/Inspector. After the sheeting has been driven, it shall be checked, as required by the Engineer/Inspector, to see that none has risen or become loosened. Sheeting that may have been disturbed by the driving shall be redriven to the satisfaction of the Engineer/Inspector.
- 3.5 Steel sheeting may be spliced during the driving operation, provided the details of splicing are approved by the Engineer/Inspector.
- 3.6 After all the sheeting in one line has been driven and accepted by the Engineer/Inspector, the sheets shall be cut off perpendicular to their axis at the

elevations indicated on the plans or as directed by the Engineer/Inspector and the pins to support the pipe railing shall be welded in place.

- 3.7 Coating of the sheeting shall be done after all driving, cutting off and welding is completed. The area to be coated shall be the exposed surface facing the channel and the pipe railing supporting pins. Prior to the application of the coating, all surfaces to be coated shall be free of rust, scale or other foreign material.
- 3.8 Bracing edges shall be straight and true, angles sharp, and surfaces smooth. Shearing and punching shall leave clean, true edges and surfaces.
- 3.9 All bracing work shall be neat and smooth and made strong, stiff and rigid. Joints shall be strong and secure. Exposed joints shall be accurate and close fitting.
- 3.10 Do all drilling, tapping, cutting, and fitting required for installation or attachment of engaging work and furnish bolts, screws, or other fastenings as necessary for attachment of other work to miscellaneous metal.

DIVISION 8 - ELECTRICAL SERVICE

Section 8A - Site Lighting

8A-1 GENERAL

- 1.1 The Contractor shall contact the Department of Parks and Public Properties City of Chester, for specific instructions before beginning this phase of the project.
- 1.2 The Contractor shall arrange for electrical service to site, including hanging of transformer and electric meter, with Philadelphia Electric Co.
 - 1.3 The service will be in the form of 240V, 60 Hz supply.
- 1.4 Utility poles shown on the drawings as being relocated will be arranged for and paid for by the City of Chester and shall not be included in the contract.

8A-2 EARTHWORK

- 2.1 Provide all material, equipment, supplies, and labor to complete all trenching, excavation, backfilling, and all other earthwork necessary to construct the required structures, underground conduits and appurtenances. Make due considerations for difficulties and contingencies to be encountered and include in the contract price all costs of earthwork. All excavation is unclassified.
- 2.2 If excavation is in a filled area or unsuitable for direct placement of duct runs or manholes, excavate further until firm soil is reached and backfill to the duct or manhole level. Where necessary to bridge an unsatisfactory bearing area, concrete pedestals shall be installed and the duct or conduit suitably reinforced to bridge the pedestals.
- 2.3 Backfill all excavations to the existing earth grades. Use earth, loam, sandy material, soft shale, or other approved materials free from large stones and clods. Backfill in 8" layers suitably compacted. Any trenches improperly backfilled or where settlement occurs shall be reopened to the depth required for proper compaction then compacted and refilled.
- 2.4 After backfilling and construction, remove all trash and debris. Leave the area neat and clean.

8A-3 WARNING TAPE

3.1 Strips of polyethylene tape, 6" wide, bright yellow in color, with two rows of continuous printing repeating every 24":

CAUTION CAUTION

BURIED ELECTRIC LINE BELOW

Tape shall be Terra Tape, manufactured by Griffolyn Co., Inc., or approved equal.

8A-4 EXTERIOR UNDERGROUND CONDUIT

- 4.1 See drawings for size, number, type and special requirements. Install top of conduits at least 30" below final grade. Grade the trenches so that the conduits will have a fall of at least 3" per 100' toward an approved drain point. Where changes in direction are required to miss obstructions, make the changes gradual. These requirements also apply to conduits encased in concrete.
- 4.2 Conduits may be galvanized wrought iron without concrete casement. Unless shown otherwise on the drawings, earth fill shall be free from cinders and slag.
- 4.3 If conduit other than galvanized wrought iron is used, it shall be polyvinylchloride, per ASTM D-149 or D-150 and encased in concrete.
- 4.4 Surround palstic conduits with at least 3" of concrete. Install approved spacers at intervals of not over 5' to insure a uniform spacing between conduits. Maje up joints with an approved waterproof compound.
- 4.5 Unless the drawing details show continuous reinforcement, reinforce the concrete envelope at all points where conduits cross fill, loose soil, water, gas, steam, or sewage piping. Reinforcements to consist of one No. 6 reinforcing rod between each two conduits in the bottom layer and one rod laid in each of the four corners of the conduit envelope. Center the rods between the conduits and place half-way between the bottom of the conduits and the bottom fo the concrete envelope. Extend the reinforcing 6' beyond each end of the fill or pipe crossover.
- 4.6 The routing of conduit as shown on the plans is general. Modifications to conduit runs shown on the drawings, as found necessary, shall be made without additional cost to the Commission and shall be subject to the approval of the A/E.

8A-5 CABLE

5.1 The cable shall be copper, as manufactured by Manhattan Electric Cable Corp. or approved equal. They shall be #10, UF cable with two insulated conductors and one ground conductor. The cable shall be as manufactured by Manhattan Electric Cable Corp. or approved equal.

8A-6 WIRE INSTALLATION IN CONDUIT

- 6.1 Pull wire into conduit only after all work has been completed that can injure the wire. No wires shall be installed in conduit until concrete, plaster, etc. is dry and conduits are free from moisture. Use only U.L. approved wire pulling compound.
 - 6.2 All wiring shall be continous with conduit runs.

8A-7 SPLICE BOXES

7.1 National Electric Code approved splice boxes shall be provided where shown on the drawings.

8A-8 SPLICES

8.1 Keep splices to a minimum, especially in pull boxes.

- 8.2 In general, use solderless pressure connectors for taps and splices on all except branch circuit wire.
- 8.3 For branch circuit splices, use a floating spring sleeve type connector, Scotch-Lok, Buchanon "B" Caps, or approved equal. Choose the correct size and so install that the wires cannot loosen.

8A-9 GROUNDING

- 9.1 Ground all equipment and the neutral conductor of the service as required by the NEC. Connect the main service ground on the street side of all valves, meters and unions. Install ground wires in conduit. Securely bond the conduit to the ground wire at both ends of the conduit.
- 9.2 The resistance between the ground cable and absolute earth shall not exceed 25 ohms and shall be measured in the presence of authoritative personnel before equipment is placed in operation.

8A-10 SITE LIGHTING

10.1 Site lighting shall be furnished and installed as shown on drawings and shall consist of 40 foot high Magnaform B square steel pole #SSP8-406-C1 with two magnaform mercury vapor luminaires #MFL-0400C-3G3-AlP by Hubbel or approved equal. Fixtures to be complete with photo control and all required hardware and installation items. Color to be dark bronze, lamps to be 240 volt, 400 watts mercury vapor (coated).

8A-11 KEYED SWITCHES

11.1 Keyed switches shall be #1181WP key switches mounted in cast aluminum, single device weatherproof box with #7794 FS weatherproof cover plate, by Arrow-Hart or approved equal.

8A-12 PROTECTION AND RESPONSIBILITY FOR DAMAGE

12.1 Effectually protect all electrical work, materials and equipment. All openings into any part of the conduit system, as well as all fixtures and equipment, both before and after being set in place, shall be securely covered or otherwise protected to prevent obstruction of the conduit or injury due to carelessly or maliciously dropped tools or materials, dirt, or any foreign matter. Cover conduit ends with capped bushings during construction. The Contractor is responsible for all damage to his work until the electrical installation is fully and finally accepted.

